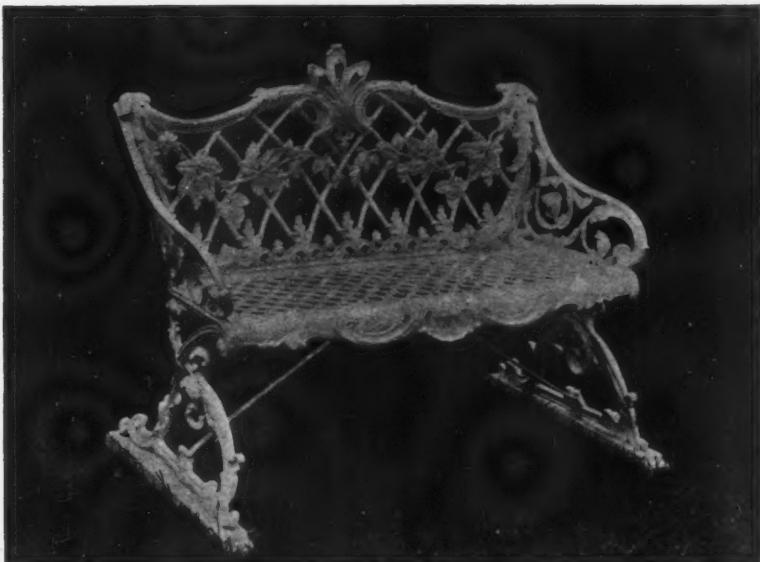


Architectural
Library

THE ARCHITECTURAL REVIEW

A Magazine of Architecture & Decoration



Incorporating
THE
DECORATION
SUPPLEMENT

Two Shillings and Sixpence Net.

Vol. LXXXVI

December 1939

No. 517

DEC 19 1939

RECENTLY PUBLISHED
for architects, engineers, borough surveyors, builders, and all
others concerned with Air Raid Precautions

CIVIL PROTECTION

THE APPLICATION OF THE CIVIL DEFENCE ACT AND OTHER
GOVERNMENT REQUIREMENTS FOR AIR RAID SHELTERS, etc.

BY FELIX J. SAMUELY
AND CONRAD W. HAMANN

Consulting Engineers

A COMPLETE GUIDE TO, AND EXPLANATION OF,
THE GOVERNMENT'S POLICY FOR THE
PROTECTION OF BUILDINGS AND PERSONS

8*½* net

Postage 7d.

[216 pages, including 400 diagrams and 46
Tables. Size 9 in. x 12½ ins. bound in cloth.]

Obtainable from all booksellers, or direct from the publishers :

THE ARCHITECTURAL PRESS, 45 The Avenue, Cheam, Surrey







The River Nene flows through the centre of Wisbech and is the source of its past prosperity and its unique character as an inland port. It is also the source of the town's architectural distinction, which lies largely in the two cliff-like terraces of Georgian houses which line the wide roadways, known as Branks, either side of the river. Above is the North Brink, seen from the opposite side. On the extreme left is Bank House, the finest of all the Georgian houses in Wisbech. At the far end is the pedimented façade of the Town Hall, opposite which a bridge crosses the river and connects the North Brink with the centre of the town.

PLATE ii

December 1939





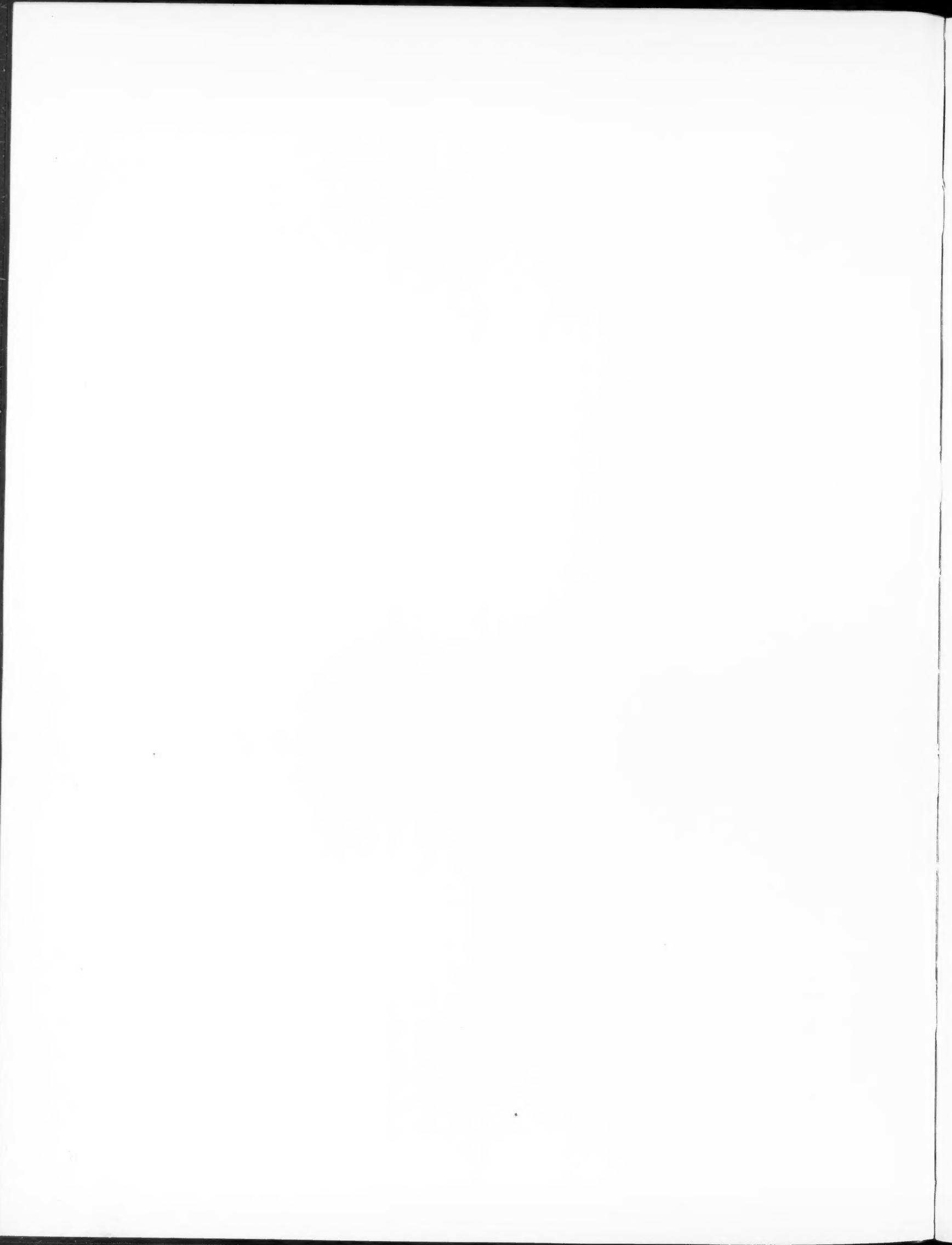


One of Wisbech's staple industries is brewing and the town possesses several fine early nineteenth century brewery buildings situated at various points along the river. That illustrated is on Nene Quay, quite close to the centre of the town. It is a good example of the nobly utilitarian architecture of its period. Its small doorways set in expanses of plain brickwork give it a startling scale.

PLATE iii

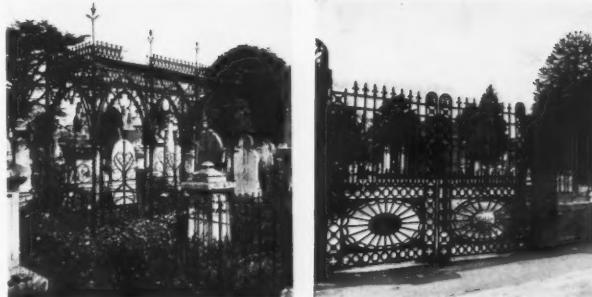
December 1939





of the Lords Lieutenant of Cambridgeshire. It appears on the extreme left of Plate ii. It is notable for two things: for the elegant side pavilions added later in unusual but impeccable eclectic taste (see figure 3) and for the rich carving inside (see Plate v). Between the gabled Gothic pile and Bank House a different more modest character is introduced by the Quaker Meeting House, a low stone building in Greek revival style, dated 1854. Between Bank House and the town stands a row of those tall Georgian houses already described, very urban and sophisticated in style, elegantly detailed. They are still in good order. The largest now display the well polished brass plates of doctors of long standing. Others have flat bay windows with a nautical flavour, again inviting comparison with Brighton. Finally, facing the bridge-head, is the Town Hall or Corn Exchange, flanked on each side by a bank. The former is another good building with the appropriate formality of a stone façade adorned with Ionic pilasters and a pediment. The latter alas only illustrate the error of trying to design contemporary buildings "in character." Their kind of laboured pastiche, known as Bankers' Georgian, is now indeed one of the recognized cautionary styles. Here again the wilful unorthodoxy of the Gothic pile further down the Brink has a moral for those whose idea of good taste consists in dressing up instead of in being themselves.

The South Brink is shorter than the North. It begins, at the end farthest from the town, with the oddly named Station Master's House, a name that appears to date from a period long before railway stations. This house is now being



Near the northern exit from the town is the old cemetery containing a charming stucco mortuary chapel of the Greek Revival in a sad state of disrepair. A corner of it can be seen in the photograph of a remarkable iron tomb, left, and it can also be seen in the background, flanked by the Wellingtonia and Monkey-puzzle trees of its period, in the detail of the cast-iron cemetery gates, right.

1860 - 1940 : A COMPARISON

A number of photographs of Wisbech, taken during the 'fifties of last century by a local amateur, Samuel Smith, are preserved in the Wisbech Museum in the form of the original Talbot-Type paper negatives. Prints from some of these negatives are reproduced below and on the following pages together with equivalent views taken today, for purposes of comparison. They show that up to the middle of last century Wisbech had survived as an almost unaltered example of the Georgian market town. Today, although subsequent development has broken up the continuity of the Georgian façades, the advent of plate glass and multiple trading has meant the disappearance of the Georgian shop fronts and the beautiful Butter Market has gone, the town as a whole still retains its original character, more strongly in some parts than in others and particularly along the river banks where the life of the town has always centred.



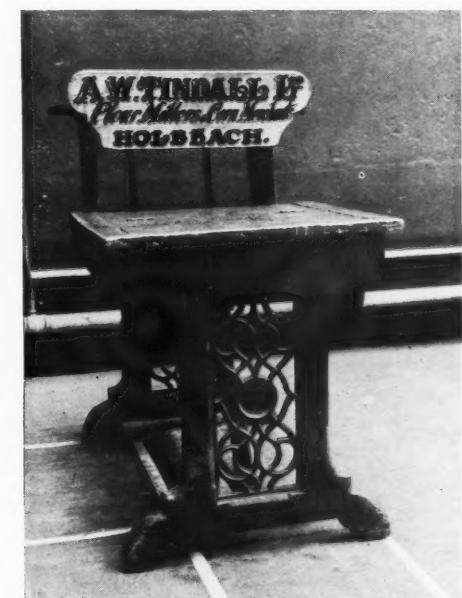
THE BUTTER MARKET

Just within the memory of the oldest inhabitants a Georgian Butter Market stood in the centre of Wisbech. It was a square brick building with an arched lower storey, of the pattern familiar in many market towns. The photograph on the left was taken in 1856. The Butter Market was demolished in the same year. On the right is the same site today, occupied by a Gothic memorial to Thomas Clarkson, the anti-slavery agitator and a native of the town.



THE HIGH STREET

The High Street has not changed fundamentally between 1854, left, and today, right; but modern commercial development has meant the loss of the reticence and the consistent scale given by the neat Georgian shop fronts. Plate glass and advertisements have transformed the lower storeys, but the only change in the superstructures is that the gabled medieval group on the right has given way to an Edwardian neo-classical façade. Note in this and the other comparative photographs how much more character the cobbled road-surface gives to the earlier view.



A corn merchant's stand, one of several dozen ranged within the Town Hall on market days, representing the exchange and export of agricultural produce on which the history and prosperity of such places as Wisbech has always been based.

demolished: a loss to the sum of decent Georgian houses in Wisbech, though it stands sufficiently apart from the rest for its destruction not to threaten the appearance of the South Brink itself, except as an alarming precedent. Distinguished features of the South Brink are a

[continued on page 239]

'WISBECH, 1860-1940: A COMPARISON



THE MARKET PLACE



The Market Place, like the High Street, has only substantially changed between 1857, left, and today, right, in the lower storeys of the houses, though one house at the far end has been entirely rebuilt. The loss of the regular pattern of the shop fronts and the growth of advertisement signs and lettering has naturally resulted in some loss of character, but here, as the market itself still survives, the stone paved road surface has not disappeared altogether. The cast-iron pump has given way to a Victorian drinking fountain at the far end. The pedimented building in the far left-hand corner is the Rose and Crown Hotel, which has only suffered the addition of an ugly iron and glass porch.



T H E N



WAREHOUSES



The chief difference between these two scenes (left, about 1860; right, today) is that in the former the riverside is still busy, with barges loading and unloading at the quays and cranes and derricks standing ready to serve them, while in the latter the quays are deserted, as water transport is not as active as it was. Barges do still come up the Nene, but not in such numbers, nor do they trade right into the centre of the town. But the cliff-like terrace of Dutch-style brick warehouses still stands and some of them are still in use as granaries. They give the centre of Wisbech much of its character as a compact river port.



B R E W E R Y



Also along the quays are several fine brick breweries dating from the beginning of the nineteenth century. This is the Union Brewery at the end of Nene Quay, photographed about 1860, left, and today, right (see also Plate iii). The present-day view is taken from further away to show the modern timber embankment in contrast to the shelving shore in the old view with its casual assortment of mooring-posts and slipways. The several good industrial buildings of this type are just as much worth preserving as the elegant Georgian houses in which Wisbech is also rich.



N O R T H B R I N K A S I T I S T O D A Y

The numbers above the buildings refer to photographs on the following pages.

[continued from page 237]

row of three-storey houses with effectively modelled brick fronts, rather reminiscent in its proportions of Hammersmith Terrace, London—the end of this row is shown in 4—the boys' Grammar School, a square stone building with a sturdy front and a glazed cupola, 6, but with an unfortunate late nineteenth-century addition in dark red brick, and a very charming group of buildings at the town end of the Brink now inhabited by the police. The care of the Police Station and cupola-ed Sessions House, 5, is a heavy responsibility, as they occupy a key position, facing the bridge-head, across the river from the Town Hall.

The two Brinks fortunately survive with most of their buildings and all their vivid character intact. Without prejudicing any necessary development—for they serve as useful a purpose now as when they were built—they may be recorded as suitable subjects for careful preservation. Turning to face the centre of the town we find that it has retained its character as a busy port and market centre with varying degrees of success. The bridge is still naturally the town's focal point. It has changed several times since the eighteenth century, not always for the better. The Butter Market has been pulled down. Now on the same site Thomas Clarkson—the anti-slavery agitator and Wordsworth's "firm friend of human kind"—surveys the bridge and the Nene quays from the elevation of his "obstinate hill"** in the shape of a Gilbert Scott style monument, and what has been lost in consistency of architectural character

* See Wordsworth's sonnet on the passing of the Anti-Slavery Bill.



**TOWN HALL AND
NORTH BRINK**

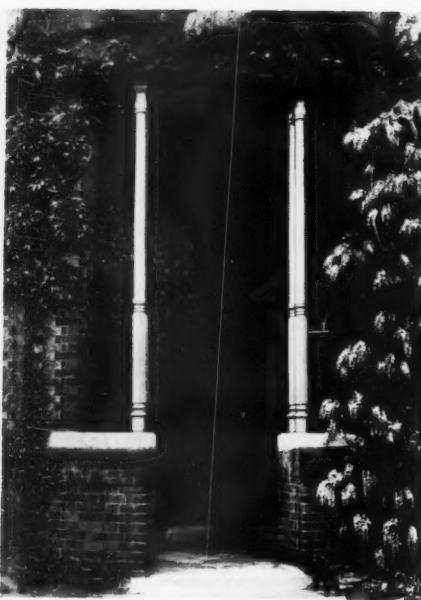
Looking along the North Brink from the bridge-head: left, in 1853; right, today. The latter view is taken from a little further away and shows the bridge in the foreground. On the right of each view is the Town Hall or Corn Exchange. Beside the Town Hall is now a neo-Georgian bank; otherwise the terrace of houses along the Brink is quite unchanged. Again the cobbled surface of an eighteenth century quay has given way to modern tar-macadam.



**NORTH BRINK
WEST**



Further down the North Brink: left, in 1859; right, today. On the right of each view is the row of gabled gothic houses that gives so much character to this part of the Brink. They can also be seen on the extreme left in the view looking down the Brink above, but they must only just have been built when it was taken.



2



3

GEORGIAN ARCHITECTURE ON THE NORTH BRINK

1, Elgood's Brewery at the extreme western end of the North Brink. A typical piece of early nineteenth century industrial architecture in brick, it is still in use. The archway with its smartly painted quoins and neat lettering round the crown leads through to a courtyard behind. 2, the porch entrance to one of the side pavilions at Bank House. The house itself (see Plate ii) was built in 1722, but the two pavilions were added probably not long before the middle of the nineteenth century. They are elegantly detailed and both have this quite unusual porch with coupled columns of a faintly oriental flavour. 3, typical late Georgian bay-windowed houses : the centre portion of the terrace of tall merchants' houses occupying the space between Bank House and the Town Hall.

and completeness of civic equipment has been gained in space.

From the other side of the open space surrounding the Clarkson monument a short street leads up to the Crescent, another piece of the town where the Georgian architecture survives nearly intact. With the two Branks it forms a remarkable sequence of careful eighteenth century planned development : a model of how good planning can be carried out on the framework of an earlier order. The very limitations of such a framework indeed produce a character that the blank canvas demanded by the modern Utopian planner will take years to acquire. It is built on the site of the old castle. The latter disappeared many centuries ago, for a subsequent occupant of the site was a large mansion, a palace of the Bishops of Ely, attributed without much reason to Inigo Jones, but more likely the work of Bell of King's Lynn. This was pulled down in

1818. Now two crescents, 7 and 8, of delightful demure late Georgian houses face each other across an intervening garden to form a circus. One is known simply as the Crescent, the other as Ely Place. Half the oval garden in the middle is open to view behind iron railings, and the other half serves as private garden to a Regency villa, 10, built on the actual site of the Bishop's Palace and retaining the latter's stone gateway as its own rather disproportionate entrance. This villa faces the north end of the circus, which opens out not into a through street but into a small dignified square bounded on the far side by railings and a flight of steps leading down to the precincts of the parish church. The two built-up sides of the square are occupied by Georgian houses and by the Greek Revival façade of the Wisbech Museum. The whole forms a well-articulated town-planning system, secluded yet logically linked at one end with the bridge-head and the

Branks, at the other with the church, and on the cross-axis—by a narrow street bisecting the curve of Ely Place—with the Market Place; intelligibly relating the diverse elements of the town as good town-planning should. It is a piece of civic design that any town would be proud to possess, as one hopes that Exeter is proud of Southernhaye, Chichester of the Pallants or Bridgwater of Bridge Street, with all of which the group comprising Ely Place, the Crescent and Museum Square at Wisbech have something in common. The curve of Ely Place unfortunately is broken by a ruthless piece of vandalism perpetrated about fifty years ago, when about half-a-dozen of the houses were pulled down to make way for a Baptist Chapel in a dead imitation Gothic style, but the effect of the whole survives sufficiently to make it another suitable subject for careful preservation. Again sentiment and

[continued on page 241]

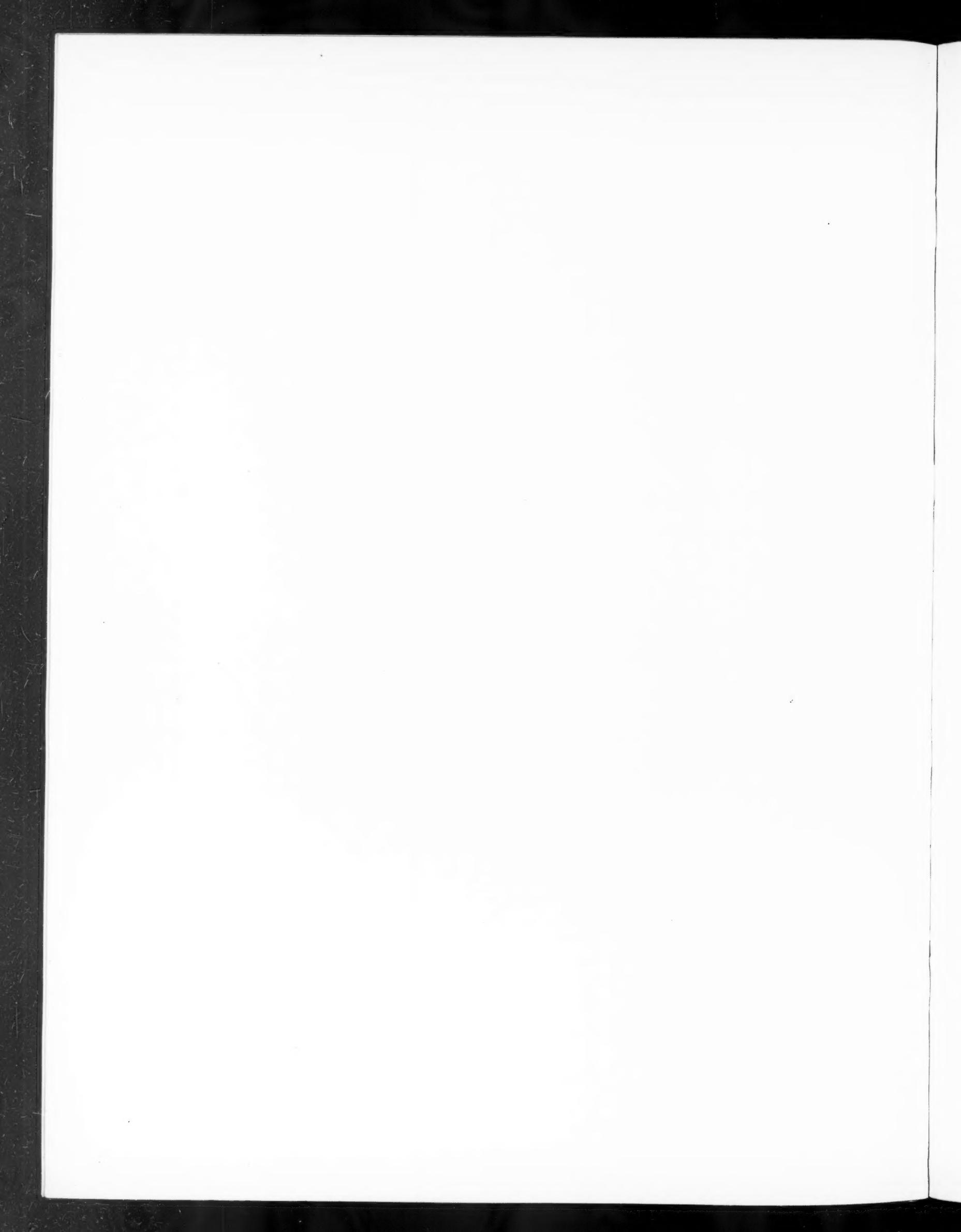


Two doorways in Wisbech, in different styles of the early nineteenth century. That on the left belongs to the Octagon Chapel in the Old Market, a remarkable Gothic Revival building in pale yellow brick, a home of the staunch Protestantism that has given East Anglia so much of its character. That on the right is typical of the late Georgian domestic work found throughout the town. It belongs to Ely Place, where the same refined and delicate pattern with its reeded columns is repeated along a whole crescent.

PLATE iv

December 1939







Bank House, on the North Brink, the most important Georgian house in Wisbech and once the residence of the Lords Lieutenant of Cambridgeshire, was itself built in 1722, but about the middle of the century it was altered inside and provided with a quantity of magnificent carving. This is thought to have been executed by a French craftsman who had been working at Houghton Hall. Above is the drawing-room mantel-piece. It is in Weimar pine, painted.

PLATE v

December 1939

UNIV.
OF
MICH.



T H E S O U T H B R I N K

4, a portion of one of the Georgian terraces on the South Brink, near the west end (see drawing above) with a delicately modelled stable archway. **5**, the eastern end of the South Brink, opposite the bridge-head, showing the group of buildings now occupied by the police, forming the corner of South Brink Place. On the left is the Sessions Court with an elegant glass cupola. Beside it is the Police Station, a three-storeyed house with its square sash windows set in arched recesses. Further along the Brink, a little set back from the road, is the Grammar School, **6**, a square building in pale yellow brick with a sturdy stone doorway and a white-painted cupola. It has an unfortunate addition in hard shiny brick of a dark red colour.



4



5



6

[continued from page 240]

beauty are on the side of use, for a quiet residential quarter in a busy market town is anything but obsolete need.

The side exit from this quarter, as already described, leads straight to the Market Place, which in turn is connected directly with the bridge-head by the short High Street. Where the two join is the Rose and Crown Hotel, a model of what the principal inn of a market town should be. The Market Place is a neatly rectangular place, very evidently still the commercial centre of the town; but to reach the spiritual centre we must look behind the Market Place—both figuratively and actually—at the great warehouses that line the river and give the market town its significance as a river port. These warehouses form an imposing cliff looking down the river from the bridge. One side they drop sheer to the water with cavernous archways leading into their interiors. On the other side a cobbled quay against which ships could moor passes the foot of another tall warehouse and along the flank of another of those spectacular breweries. This stretch of the river contains the essence

of Wisbech, where its character is most clearly portrayed in the curve of river, the mud banks where old rotting posts are visible at low tide, the barges moored beneath the cobbled quays, the humble shops and public houses overshadowed by the tall brick warehouses—overshadowed, but not cowed by them, as the slum cottages are cowed by the slag heaps and blast furnaces of the black

country; for it is part of the character of this place that it represents a balanced community.

The foregoing is a brief catalogue of the architectural glories of Wisbech, omitting only the many good Georgian houses which the town, like most towns of its kind, possesses, apart from the planned terraces and crescents described, and omitting also one other unique



W I S B E C H B R I D G E

The bridge has been twice replaced during the past century. The two photographs on the left were taken in 1853 and 1858 respectively. The first shows the charming eighteenth century stone bridge (built, 1758; demolished 1855) which must have blended well with the stone-faced Town Hall close by. The second shows the very uncompromising engineer's iron bridge (built 1857; demolished 1931) with the odd toll-house structure at one end. The latter was followed by the present bridge, right, unfortunately of rather vulgar design, the least distinguished piece of architecture in Wisbech.



7



8



9



10

THE CRESCENT

7, looking along the Crescent which, with the corresponding crescent-shaped Ely Place, 8, forms a circus surrounding the site of the old castle and later of a palace of the Bishops of Ely. This site is now partly occupied by a Regency villa, 10, which stands behind the original stone gateway of the palace. This view is taken from Museum Square which opens out of one end of the Crescent and with it forms an admirable piece of Georgian town-planning, intelligently linking up the focal centres of the town. In this secluded residential quarter the Georgian architecture survives almost intact, although Ely Place has been broken into to make room for a Baptist Church, 9. In 8, taken from the front of the church, it can be seen how the terrace of houses has been ruthlessly sliced through. A detail of the doorway of one of these houses is given on Plate iv.

building, the Octagon Chapel in the Old Market on the north side of the river; an ambitious building in Georgian Gothic Revival style (see figure 11 and Plate v), in yellow brick with stone trimmings, full of the solid character that means so much in East Anglia. And in mentioning this character we must remind ourselves that a catalogue of monuments was not what we set out to give; rather to interpret them as representing a personality.

To define that personality we must bear in mind the countryside out of which this East Anglian town life grew. That gives us one clue to the brave sweep of skyline and foreground we find along the Branks: the fen landscape with its clean peaty air, its black soil full of wealth for the farmer and yet full of the constant threat of inundation; so that the rich indolence we know in the Suffolk or Devon landscape gives way to watchfulness: men have to struggle to keep the upper hand. The absence of fuss and flourish in the architecture, the simple masses of brickwork rising from the quaysides, even the trimness of the painted wooden railings between the Branks and the river, are typical illustrations of the forthrightness thus engendered. It has much in common with nautical architecture, because that is also an expression of effort and watchfulness.

And we must also look for the source of that culture that enabled the successful farmers, merchants and provincial gentlemen

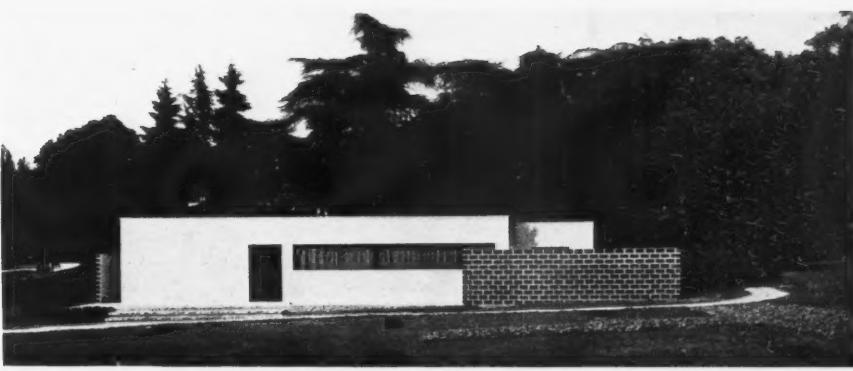
to build on a fundamentally commercial framework a community with mature sophisticated taste. It would need a history of eighteenth-century civilization as it manifested itself in East Anglia to explain it fully, but some indication may be found in the unity already mentioned, that allowed each element in the local life its due proportion of emphasis and expression, producing a microcosm of the balanced community. Another factor that comes into the picture is the strong protestant and, later, nonconformist tradition of East Anglia that not only found appropriate expression in the civic worth, the matter-of-factness, of Georgian building, but resulted more indirectly in a localization of culture. Until as late as 1871 dissenters were not allowed to enter the English universities, so enterprising towns that had a strong nonconformist tradition perforce became culturally more self-contained, being driven back on themselves by this and similar restrictions; or at least they did not suffer the withdrawal of their most cultivated elements.

The term "provincial" only becomes a term of disparagement when some such withdrawal as this results in contentment with second-rate standards and a loss of enterprise. But a provincial town may for many reasons succeed in maintaining the best standards of its time, the most progressive planning (within the limits of its resources) and a native culture, leaving a vivid embodiment of them to posterity.



11, the Octagon Chapel, facing across the Old Market towards the bridge, is another remarkable early nineteenth century building. It is in yellow brick with its Gothic Revival windows, pinnacles and pierced parapet in stone. A detail of its door is given on Plate iv.

THE OCTAGON CHAPEL



V I L L A S 1 F I G I N I A N D P E L L I N I

This villa for an artist near Milan is planned on three sides of a square. A high wall encloses the house and part of the garden. A large living-room occupies the whole of one wing and it is subdivided into dining, living and library quarters and also includes screens on which to hang pictures. In another wing are the service rooms and the studio which overlooks the tree in the enclosed courtyard. The bedroom on the third side also opens on to the courtyard in front of a small bathing pool. The house is of steel frame construction with concrete slab walls rendered in white to contrast with the strong red of the wall.

1, a general view. 2, the courtyard which encloses an existing tree and shrubs. The curved protecting wall is painted orange on the inside and blue-grey on the outside and the floor is of light-ochre colour cement squares.





Situated at Urio on Lake Como this garden terrace overlooks the lake. A wooden staircase leads to a living-room underneath. The trellis window by the staircase is finished a lacquer-red colour and the same colour is repeated in the trellis for climbing plants on the right of the photograph. The roof,

and the iron pillars which support it, are painted white. The grass inside the balustrade is continued in between the irregular shapes of the white marble terrace. Glass doors open on to the terrace from the stairs.

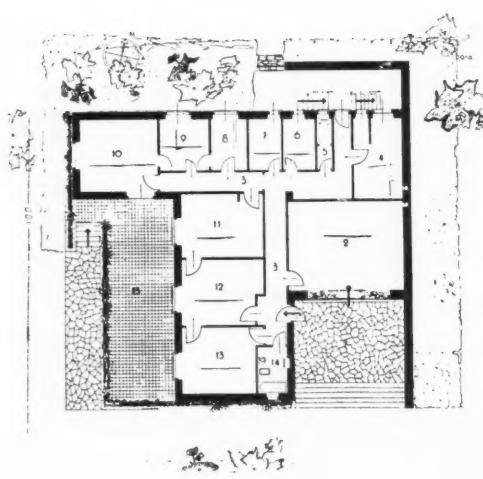
VILLAS 2

FRANCO ALBINI

This villa is in the Carso district of north Italy where there is a strong prevailing wind. To protect the house a wall of local stone runs the full length on the east side, 2. Bedrooms open on to the terrace, 1, and the living-room opens on to a yard behind the protecting wall. The walls are lime-washed a salmon pink colour.

KEY TO PLAN

1 Yard.	8 Kitchen.
2 Living-room.	9 Office.
3 Store room.	10 Dining-room.
4 Cloakroom.	11, 12, 13 Bed-
5 Servants' bath-	rooms.
6, 7 Servants' bed-	14 Bathroom.
rooms.	15 Terrace.



VILLAS 3

BANFI, BELGIOSO
PERESSUTTI AND ROGERS





TOWN HALLS 1

C. COWLES-VOYSEY

PLANNING The new Cambridge Guildhall is situated on an island site overlooking Market Hill where the administrative offices of the town have been for several hundred years. Space was severely limited and the scheme provides for the redevelopment of adjacent buildings at a later date, but temporarily the new buildings are linked with part of the old block. The new buildings contain the usual administrative offices, a Council chamber and Council suite and also Police and Sessions courts.

CONSTRUCTION AND MATERIALS The building is of steel frame construction with cavity brick curtain walls. Floors, roofs and staircases are of reinforced concrete, and the basement which is tanked with asphalt is also of reinforced concrete. The foundations needed especial care, as, in places, they are below water level and running sand was encountered.

1, the main entrance. 2, the street elevation overlooking Market Hill.



2

TOWN HALLS 1

C. COWLES-VOYSEY



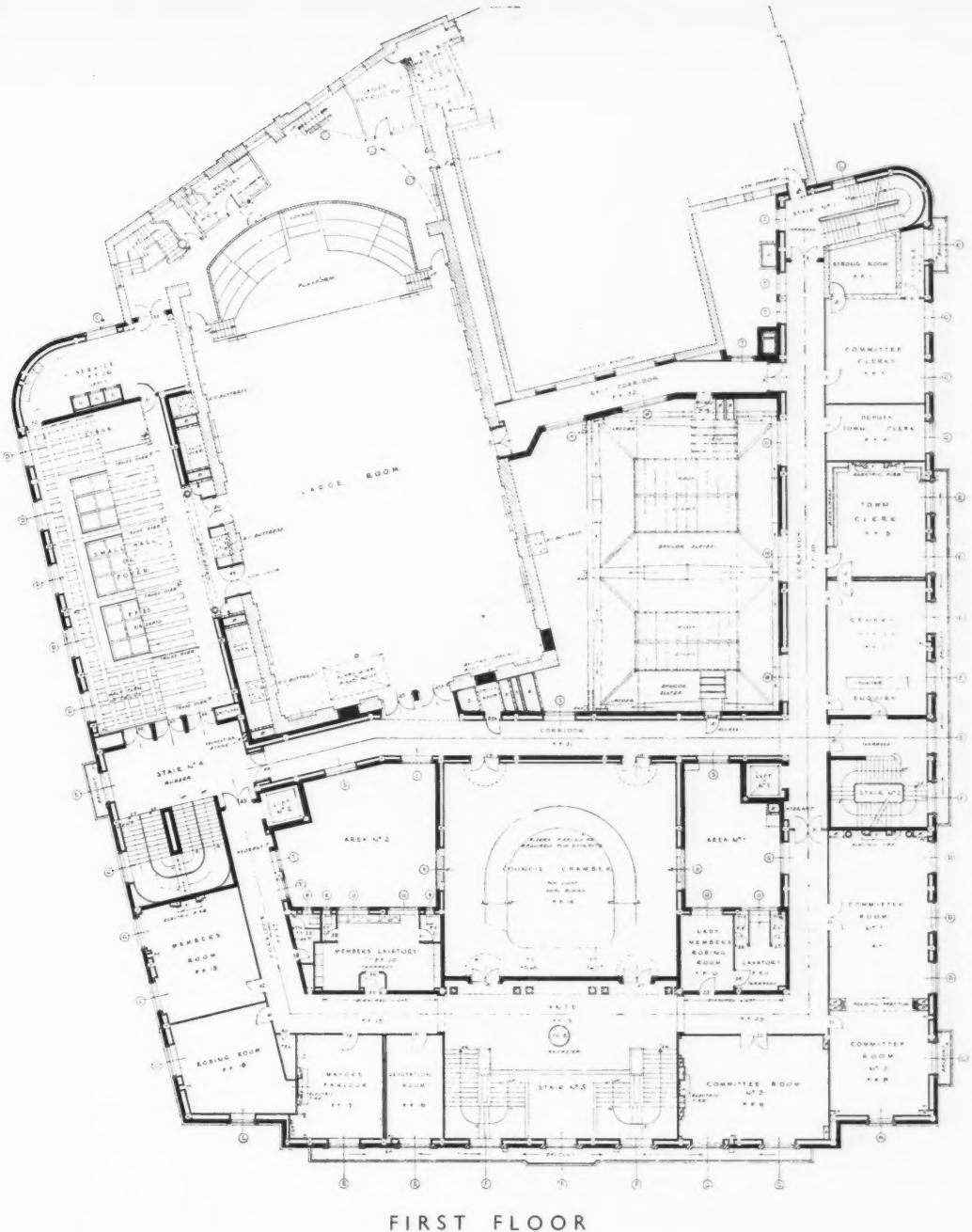
GROUND FLOOR

EQUIPMENT AND FINISHES. The ground floor, cornice and window dressings are of Clipsham stone and a Stamford brick of slightly contrasting colour has been used for facing. The entrance doors and casement windows are bronze. Flooring generally is teak block with terrazzo for floors and walls of lavatories and secondary staircases. Walls are plastered with painted dadoes. Ancaster stone linings have been used for the main staircase. The Council chamber is lined with leather and joinery is in oak and walnut in the main rooms. Heating is by low-pressure hot water through ceiling panels with gravity-fed coke fired boilers. Synchronized electric clocks have been installed throughout.

3, the landing at the top of the main staircase outside the Council chamber. 4, the Sessions court. All joinery is in oak.



3

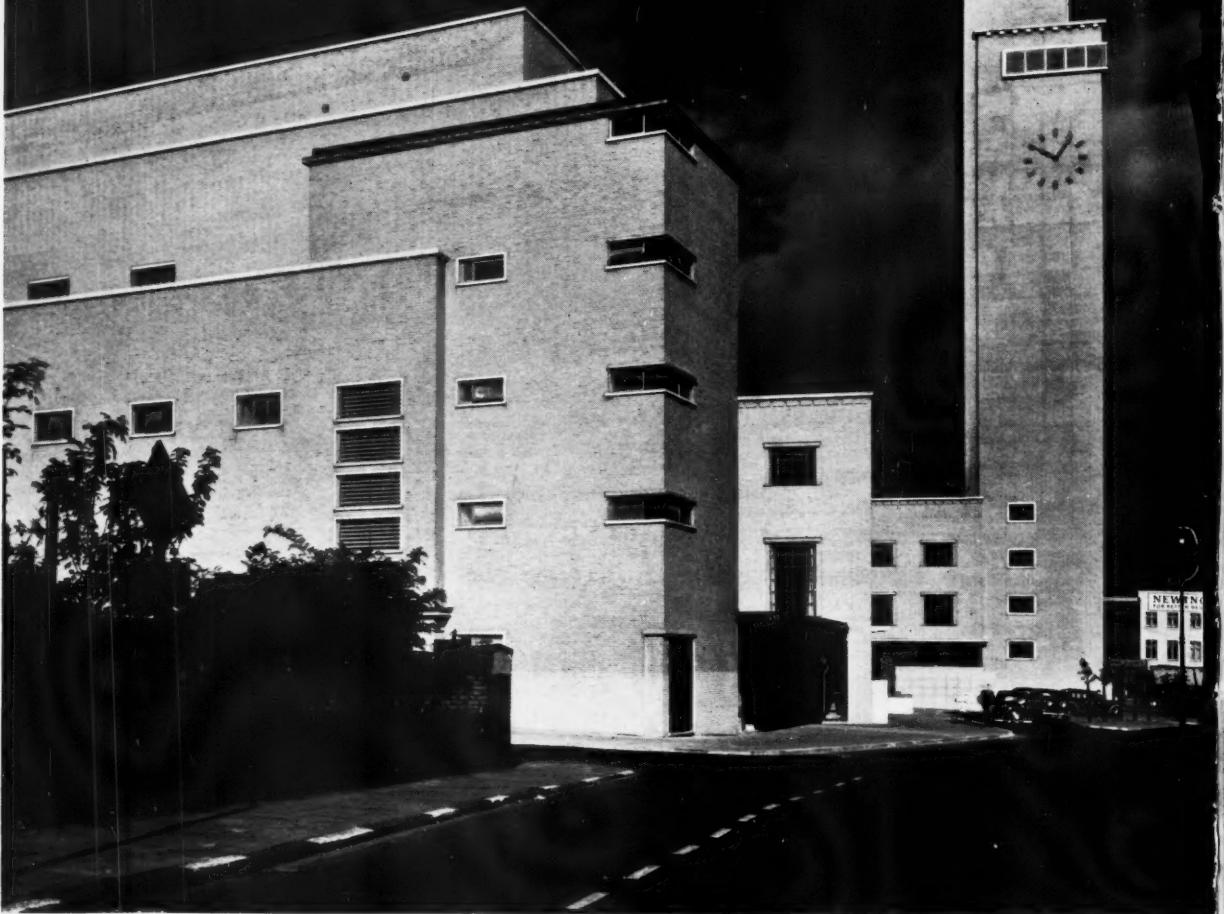


5, the Police court. 6, the Council chamber. The walls are leather-covered and the joinery and fittings are of Australian walnut. 7, the Committee room. The panelling and furniture are of English walnut, which is also used in the Town clerk's room, 8.

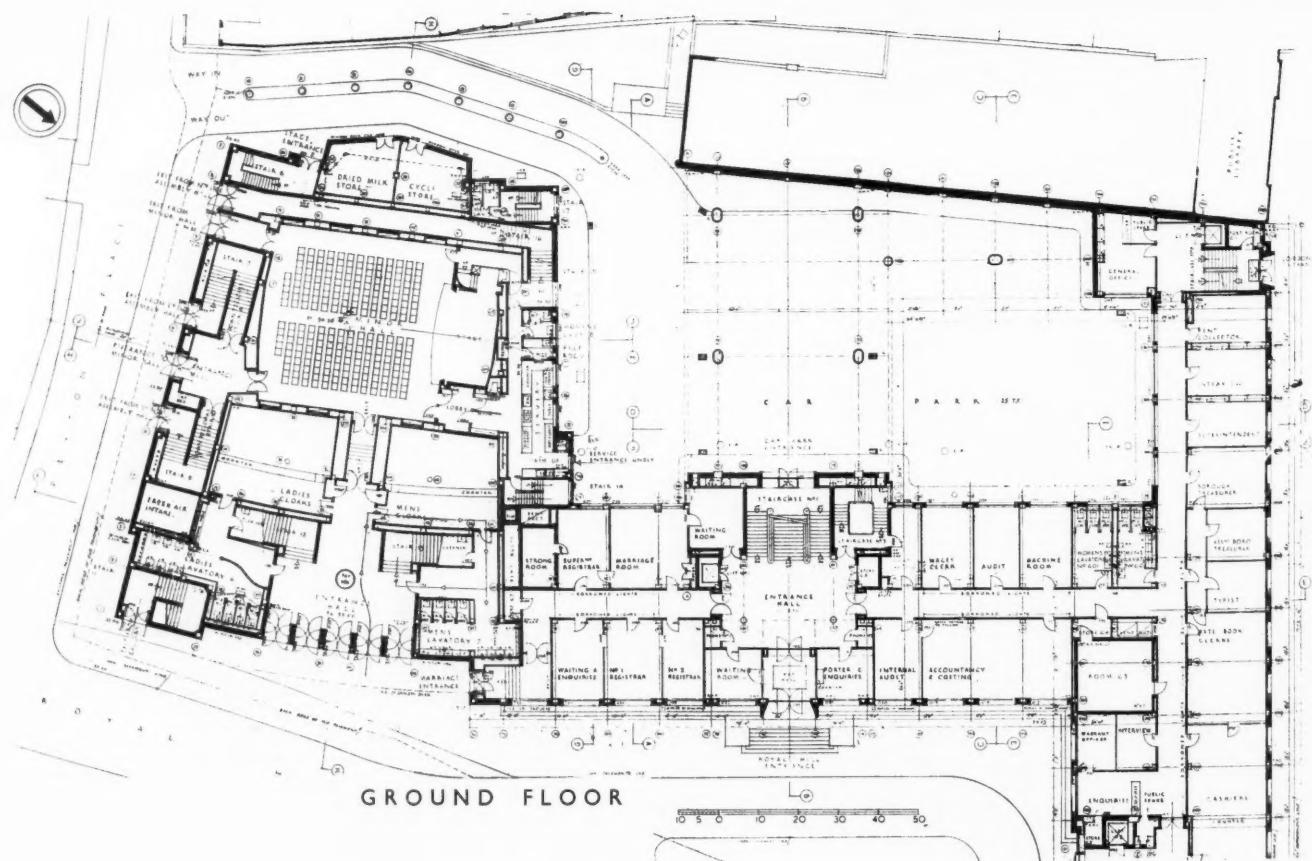
TOWN HALLS 2

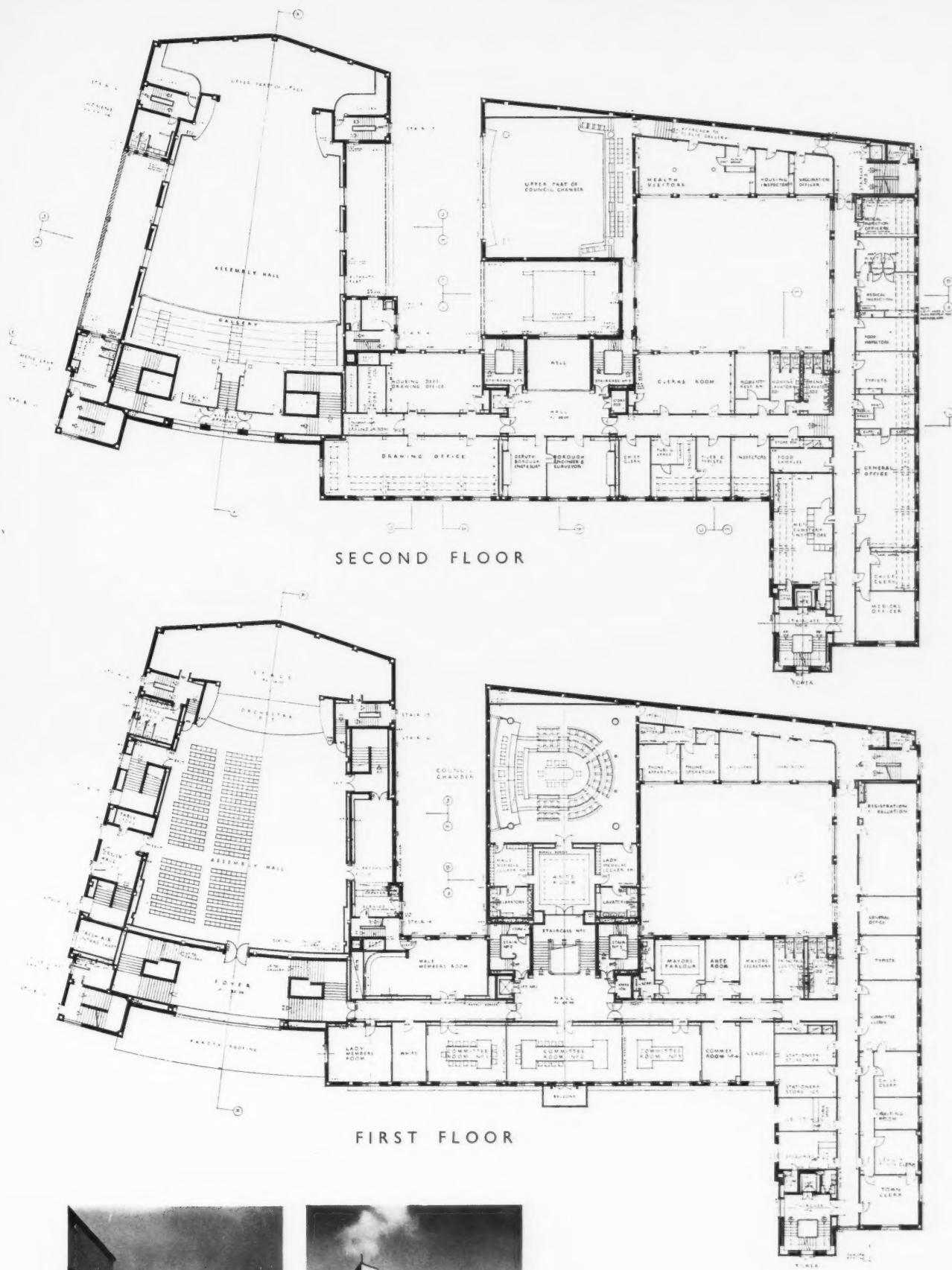
CULPIN AND SON

PLANNING The building consists of two main blocks, one consisting of large and small assembly halls, and the other of administrative offices and the council chamber. These are linked by a corridor with committee rooms and the mayor's suite on either side. The large hall on the first floor is used for meetings, dances, and film and theatre shows and seats 773 including the gallery. The small hall has a separate entrance but is linked to the large hall for use as a supper room. Stores and record offices are housed in the basement, and the third floor (of which the plan is not shown) contains a caretaker's flat and staff rooms.



1, a view from the south-east looking towards the entrance with the block containing the large and small halls on the left.





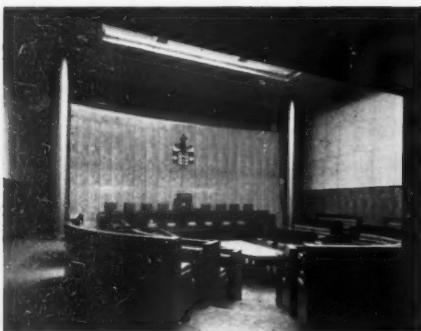
2



3

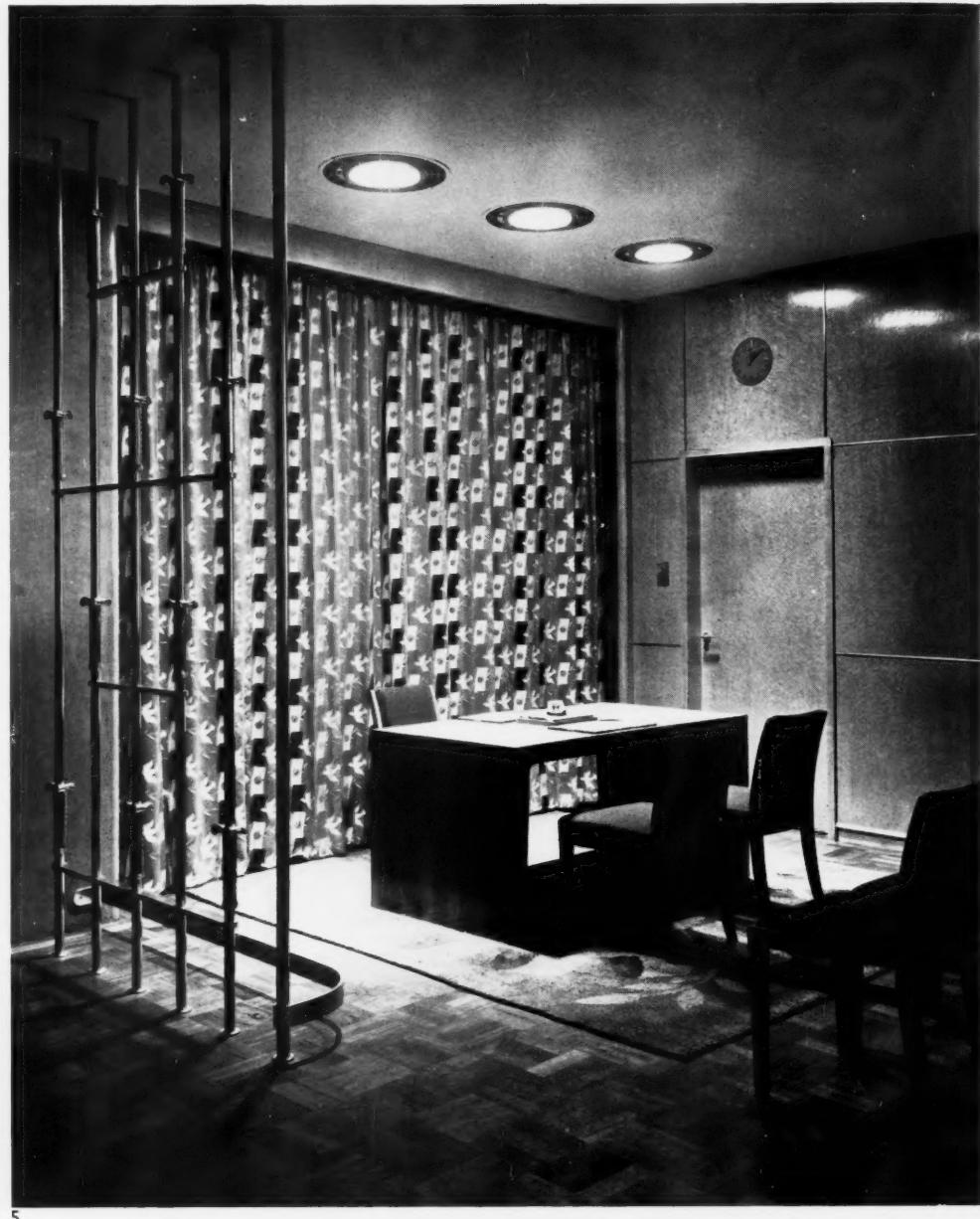
CONSTRUCTION AND MATERIALS The office block and civic suite including the tower are of reinforced concrete construction and an extra storey has been allowed for. The block containing the assembly halls is of steel frame construction. External 13½ in. brick walls are lined throughout with 3-in. slabs as additional insulation and to provide space for all ducts. The tower and elevations are faced with orange hand-made bricks laid to a special bond giving vertical lines of headers. The plinth is in grey Cornish granite above which are continuous flower boxes.

2, a view from the south-east showing the entrance to the assembly halls. 3, a view of the administrative offices and tower from the north-west.



4

EQUIPMENT AND FINISHES All stairs and ground floor corridors are finished in terrazzo; the remaining corridors are of oak blocks. All offices have flush doors, beech block floors and built-in cupboards. The civic entrance hall and principal stairs have travertine walls with moulded vertical joints, the floors are golden travertine and the architraves, column casings, handrailing and doors are manganese bronze. The large hall has a maple floor with a dark brown removable carpet. The walls are covered in a pricked muslin over acoustic felt finished in matt paint and the dado below is Australian walnut. There is an air-conditioning installation and all heating is by ceiling panels.



5

4, the Council chamber. The structural columns are finished in gilt lacquer. The dado is weathered sycamore, the walls are covered with natural fibre-board V-jointed. The fittings are English walnut and the seats are covered in Indian red morocco. 5, the marriage room. The floor is teak block and the walls are panelled in bird's eye maple with aluminium dividing strips. The silver bronze grille separates the marriage recess from the rest of the room. The curtains are white, lime green and mauve. The furniture is English cherry. 6, the male members' room. The walls are covered in a paper-mounted Australian walnut veneer and the furniture is in Australian walnut with green morocco covering. 7, a staircase landing.



6

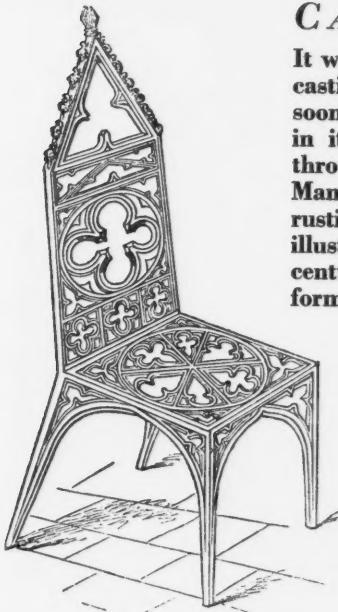


7



CAST IRON GARDEN FURNITURE

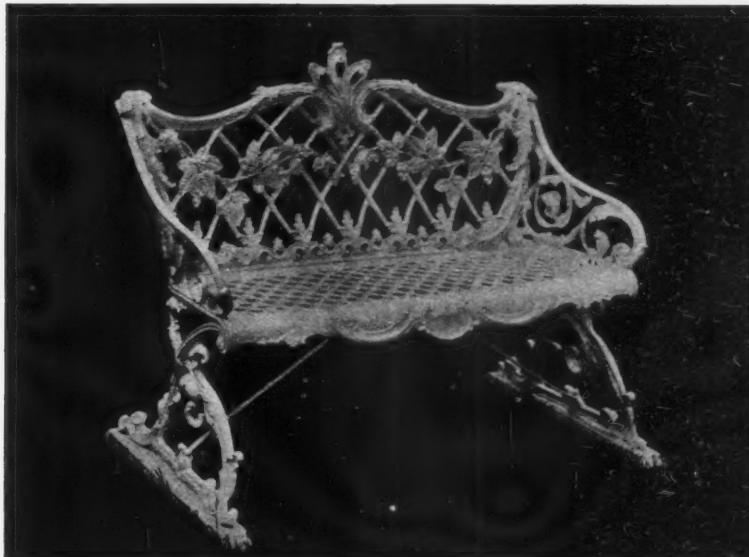
It was not until the end of the eighteenth century that a satisfactory technique for casting iron in any but the simplest shapes was discovered. Its possibilities were soon exploited in fences, balconies and tradesmen's signs but the variety of invention in its use is best shown by the garden chairs and tables which were popular throughout the nineteenth century both on the Continent and in this country. Many designs were no more than a poor imitation of wrought iron work or of the rustic benches of the eighteenth century landscape garden, but as the examples illustrated below and on the next page show, cast iron even at the end of the century displayed lightness and grace which had by then disappeared from the forms of ordinary furniture.



A design for a Gothic chair in cast iron, from Loudon's "Encyclopaedia of Cottage, Farm and Villa Architecture" (1833). To be cast in three pieces, afterwards to be riveted together.



At the time when a Gothic garden seat would have been the delight of an amateur revivalist cast iron technique had not yet been established, consequently this English chair dating from 1830 is a rare example of its kind.



Another English example showing the lightness and grace of cast iron furniture in the latter half of the century. The example dates from 1873 and has the naturalistic plant ornamentation characteristic of the English style.

B O O K S

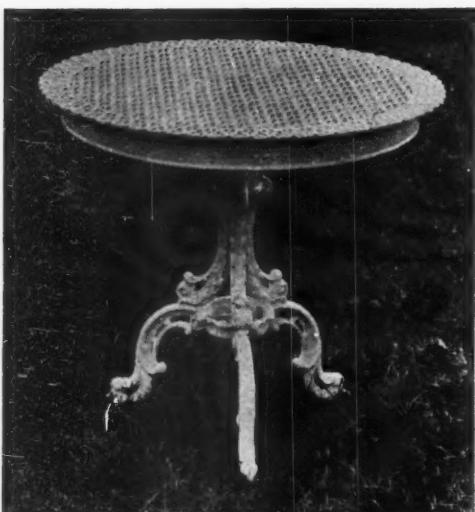
A Key To A Kingdom

A KEY TO MODERN ARCHITECTURE. By F. R. S. Yorke and Colin T. Penn. London: Blackie and Son. Price 5s. net.

DURING the past few years a number of books have been published on modern architecture, but few of them have been popular, either in price or in content. Most of them have been in the form of information or preachers to the architect and the coterie. Those few that have been popular in intention have tended to be restricted in perspective. The great virtue of this book is that it has historical perspective, both past and future; the key does not merely open the front doors of a few experimental houses in Hampstead and the European capitals. Although the authors may gallop somewhat roughshod from Babylon to Sydenham Hill they give a fairly intelligible explanation on their way in spite of their breathlessness, and the rest of the journey past the shoddy suburbs and the gleaming High-points to the *Ville Radieuse* is more leisurely and, let it be noted, not entirely visionary.

After the historical gallop through changing society and architecture the book has a good section on the revolutionary changes in structure that have taken place since the opening of the nineteenth century. A section on the new aesthetic follows, arguing from the plan and its needs, and the impact of new materials: ". . . when we plan and construct according to our needs, with freedom and economy, the accepted traditional sense of dimension, proportion, and scale is destroyed." Our "needs" rather beg the question, but there is no space to discuss that here. The book ends with a chapter on future possibilities, dealing with mass-production and the wider aspects of constructive town-planning which are inseparable from the modern architect's philosophy. Sensibly not fighting shy of the political implications which this outlook involves it states, in short: This is what you could have, and it could transform your lives; these are some of the obstacles, but they are worth overcoming.

It is essential that such views as these should be put before the public in every possible way. The fallacy of some architects who have social consciences seems to be that although they are eager to persuade others that a socialized Britain would open up vast possibilities for the whole population, and are adamant that the public is ill-informed on this point, they are curiously blind to the situation that the public is equally ill-informed on the question of architecture, and that it is utterly oblivious of the great advantages that modern technique and architectural thought could provide in the whole of our physical environment if it had the social opportunity. Modern architecture, its techniques and theory, from the individual family shelter to the town and its relationship to country, is a vital branch of social knowledge; that knowledge must reach the people towards whose happiness and well-being it is directed. "If our immense technical achievements are ever to be applied to the advancement of the happiness of the whole of humanity, and not to the private gain of a small section of it, then the nature and possibilities of modern architecture must be widely understood." So say Messrs. Yorke and Penn. Power to their elbows. The fight is on two fronts, inside the profession and inside the Englishman's castle, and it is the latter front that particularly needs developing. It is a fully constructive fight, and the promise of a three years' European war does not lessen by one iota the need for carrying it on.



Some more illustrations of how the possibilities of cast iron were exploited in the nineteenth century. Garden furniture of this kind was usually painted either in white, to contrast with the surroundings, as in the English table at the top dating from 1875, or in shades of dark green or bronze. The two garden seats show typical variations of English design, the latter (which comes from Pains Hill) showing a fern motif from the earlier part of the century. The two illustrations at the bottom show, left, an early German example, strong and simple but no less graceful, and on the right an English table, actually found in Holland.

CAST IRON GARDEN FURNITURE

A Planned Water System

ENGLAND'S WATER PROBLEM. By H. Spence-Sales and John Bland. London: Country Life. Price 8s. 6d. net.

TOWNPLANNING is associated in the public mind with urban and regional planning problems. This attitude unfortunately is not only restricted to the public. Almost all the proposals of contemporary planners have been coloured by an urban outlook, from schemes as widely divergent as Le Corbusier's "Ferme Radieuse" and "Village Co-operative," to our own regional and zoning plans. It is of particular significance, therefore, when townplanners undertake a survey and analysis of a problem of importance to the whole of national planning. In their survey of England's water problem the authors of this book are biased towards the rural solution, and have taken as the subject of their survey the factors necessary for a good water supply for agricultural, industrial and domestic purposes. It is a commonplace to find that most of the information required on which constructive planning proposals can be based is widely dispersed under local and regional bodies and is generally quite incomplete from a national point of view. Water supply is no exception to the rule. The list of commissions, committees and various bodies who have been concerned in trying to establish some form of ordered knowledge of the position is legion.

The attitude of local authorities to each other is typical of the difficulties to be faced. Public utilities such as water, gas and sewage are becoming complex organizations. The capital expenditure required to run them is quickly rising as standards of efficiency improve. In this situation it becomes progressively more difficult for large rural authorities with widely dispersed and poor populations to deal adequately with the services required. The only solution is an arrangement with the urban authority to extend their public utilities to include the rural area.

The slow breakup of the traditional landlord system, which under present legislation can only increase, is an even greater difficulty. Whatever can be said for the political necessity of these laws, and there are strong arguments in their favour, it is only now being realized, that by the adoption of purely negative legislation, grave drawbacks are incurred. It is impossible today for the responsible landowner properly to fulfil his task of maintaining the welfare of his land and tenants. As farming in its struggle to maintain living standards adopts more scientific measures, it also becomes increasingly dependent on water supply piped to all parts of the farm. The widespread adoption of "turn about" farming, where it is absolutely necessary to have a supply in each field, the enormous amount of water required for milk cooling, compulsory under the Milk Marketing Board's scheme, and the breeding of fat stock, are all examples of expenditure for water supply which must be undertaken if farming is to survive.

It is interesting to note that in the authors' opinion the necessity of planning water mains along arterial roads has largely encouraged ribbon development. The whole of the legislation which in the first place permits the use of such building sites is of course responsible, but there is no doubt that this has been a contributory factor.

In conclusion it must be remarked that many of the illustrations hardly add to the thoroughness with which this whole survey has been undertaken. They seem quite unnecessary, except as pictures. It is a pity, too, that no maps have been included, as they would have helped to clarify much of the statistical data. An acknowledgment is made to *Country Life* for constant guidance and encouragement. We can only hope that similar intelligent sponsoring will be given, when conditions permit, to other equally important problems of national planning.

ANTHONY COX

LEO DESYLLAS

WALLPAPER

Its Design and Use in
the Modern Interior

By F. J. Harris

Unlike most of the materials which have been previously dealt with in this series of supplements, wallpaper has not the same interest as a substance nor is it susceptible to much technical innovation. It is therefore with its design and with its proper use in the modern interior that this supplement deals. Other materials of a similar character which are also applied by pasting to the wall surface are mentioned at the end of the supplement.

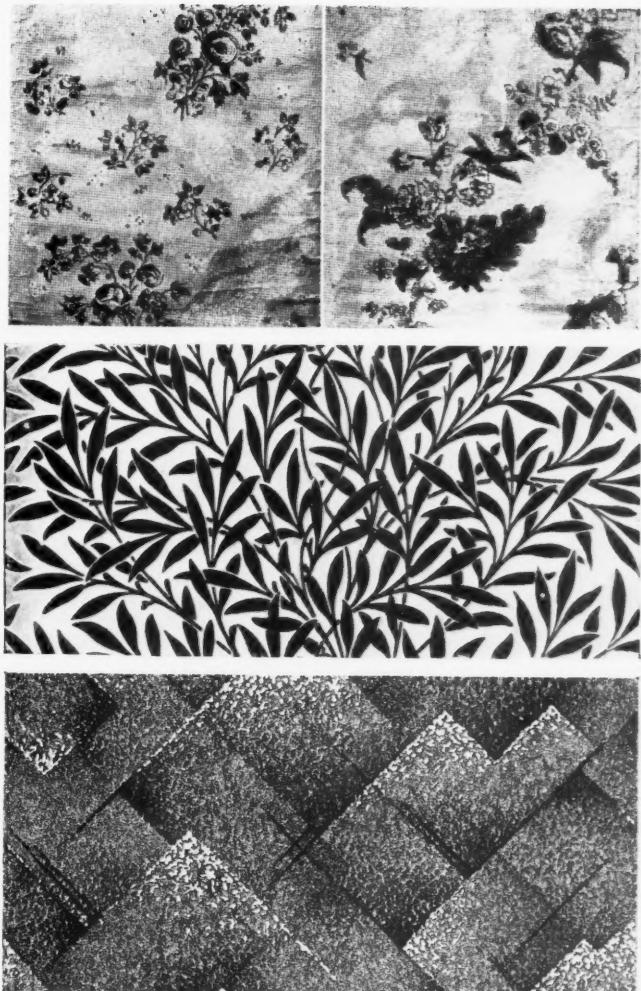
Historical Note

Wallpaper has been in constant use as a wall covering since the fifteenth century at which time it was hand-painted and served as a substitute for the richer and more costly tapestry hangings of the nobility, and it was not until its vogue in the later eighteenth century that it ceased to be regarded as a substitute material. Since this time the cheapness of machine production has maintained its pre-eminence. John Gregory Grace, one of the earliest historians of wallpaper, in a lecture at the R.I.B.A. in 1839 divides wallpapers produced before the eighteenth century into three types "the Flock, the Metal, and the Coloured, and each of these seems to have been invented at a different time as an imitation of a distinct material. The Flock (called by the French originally, *Tonture de laine*) to imitate the tapestries and figured velvets, the Metal in imitation of the gilt leather, and the coloured as a cheap substitute for painted decorations."

Block-printing was the general method of manufacture current towards the end of the seventeenth century; although stencilling was used it remained a less popular method and almost died out towards the end of the eighteenth century. Papers were usually printed in sheets of about three-quarters of a yard long (the present standard size is 12 yards by 21 inches) which were joined to form a roll 12 yards in length, but this method was unsatisfactory as the joins were always visible and often peeled away.

As an industry wallpaper in the seventeenth and eighteenth centuries was predominantly French, consequently designs produced in England during this period are almost wholly French in character.

The industry gradually developed during the seventeenth century, there



Although the most popular wallpapers in the eighteenth century were pictorial, the all-over pattern type was produced by leading English manufacturers. The examples at the top, typical of the work of Eckhardt and Sherrington show the extent of French influence. Centre, a simple naturalistic pattern designed by William Morris, in reaction from the heavy florid patterns of the later nineteenth century. Bottom, a modern "futurist" example, still the most common product of the present-day manufacturer. The example used as a title piece, a design by Edward Bawden, represents the best modern type of all-over pattern.

ALL-OVER PATTERNS

and Extravaganzas. With appropriate labels to the Principal Figures."

As designs became more intricate the number of blocks used increased in number to as many as a thousand for landscape scenes such as those in the Carlilian collection exhibited in London a few years ago.

It was in the thirties that machine printing was first introduced, Charles Potter's successful adaptation of the existing roller printing methods used for calico resulting in his establishment of a factory at Darwen, Lancashire. From then onwards the industry rapidly

developed and its standard of design was always a faithful reflection of Victorian middle-class taste, from the trellises, ivies, spots and diapers of the early period to the heavy floral patterns, often in black and red colourings, which lined the staircases of the well-to-do at the end of the century. In 1861 William Morris founded the firm which still bears his name and Philip Webb, Crane and Voysey followed his inspiration in designing wallpapers; but, while in some spheres his ideas were taken up and developed, his wallpaper designs were merely assimilated without any advance

being made. One might say that socially at least wallpaper has been on the down-grade ever since the eighteenth century, for its present character in design, partly a legacy of the worst Victorian standards and partly an adoption of misunderstood "cubism," rarely rises above the vulgarity of suburbia. There are many reasons why the standard of design has fallen noticeably behind that of other components of the interior, but now that modern architecture has outgrown its early purist phase and is developing greater flexibility the conditions are ripe for a timely renaissance.

Manufacture

The manufacture of wallpapers follows very closely that of printed fabrics, the two main divisions being hand-block printing and machine roller printing. There are, however, various papers on the market such as oatmeal or "ingrain" papers which are sold as they are produced by the paper mill, being merely reeled off by the supplier. These papers, mostly available in neutral shades, are probably the cheapest form of wall-covering providing a pleasant background. A recent development of the same type of paper consists of wood chippings introduced between two layers of paper, which gives a texture similar to a rough plaster. In addition to the methods described below, stencilling is a process used a good deal in making borders and decorative motifs, but its use in the production of actual wallpapers is very small.

Block-Printing

This is the oldest method of wallpaper printing as indeed it is the earliest method of printing in any form. It is, of course, an expensive method, but has the advantage over roller printing that the small initial outlay enables more experimental designs to be produced and (as in the case with furnishing fabrics) any lead towards a new standard of design seems likely for this reason to originate with this method of production. A much greater density of colour is obtainable and the slight irregularities of texture which accompanies all handwork are usually an added attraction. In addition, a small quantity in special colourings can be printed without much extra expense. The surface of the block, usually 22–26 inches long, is made of sycamore or other hardwoods, rubber, lino or metal according to the delicacy of the pattern and the type of paper on which it is to be printed. It is interesting to note that some blocks cut in the early eighteenth century are still in current use. It is important not to dismiss, as some might, this method of production as arty-crafty, for although this is in part true, as has been pointed out above in its possibilities for cheap experiment lies some hope of a new approach to design.

Roller Printing

Accurate engraving is necessary for producing rollers which must register exactly in a pattern in which a dozen or more may be used. Consequently the initial outlay on a new pattern including overheads may be as much as £150 and this, quite as much as the fact that most manufacturers are out of touch with contemporary taste, is a serious stumbling block in the way of better designs involving commercial risk.

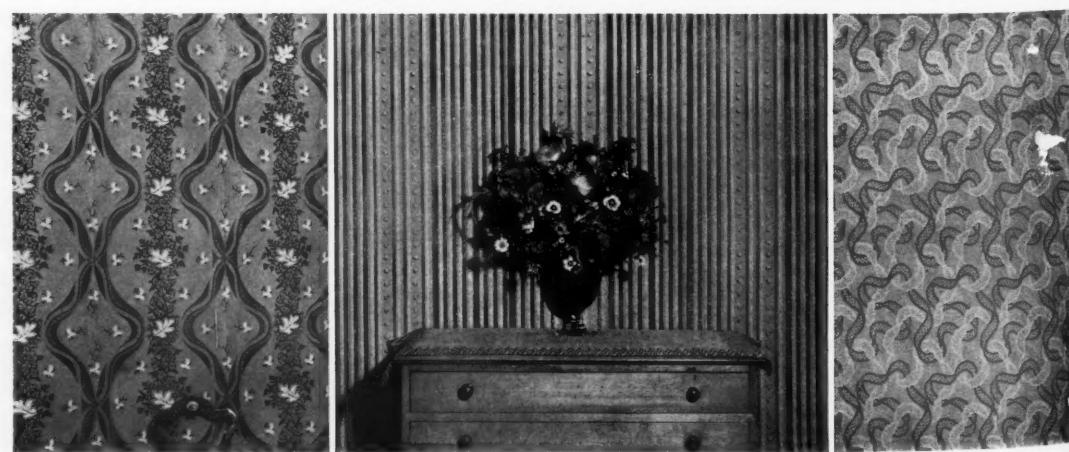
Technical advances in recent years have enabled an increase to be made in the number of rollers used in the same machine (sometimes as many as twenty) and new methods of drying allow the pattern to be run through receiving each impression in quick succession. An unfortunate vogue for blurred effects (whether a genuine public taste or not it is difficult to estimate) is satisfied by running through each successive roller with the previous colours still wet. After running through the colour rollers the reel is then embossed, except in the very cheapest quality papers which are too thin to take an impression. This embossing, added in many cases in a well-meant attempt to imitate a tapestry hanging, often spoils an otherwise pleasant pattern.

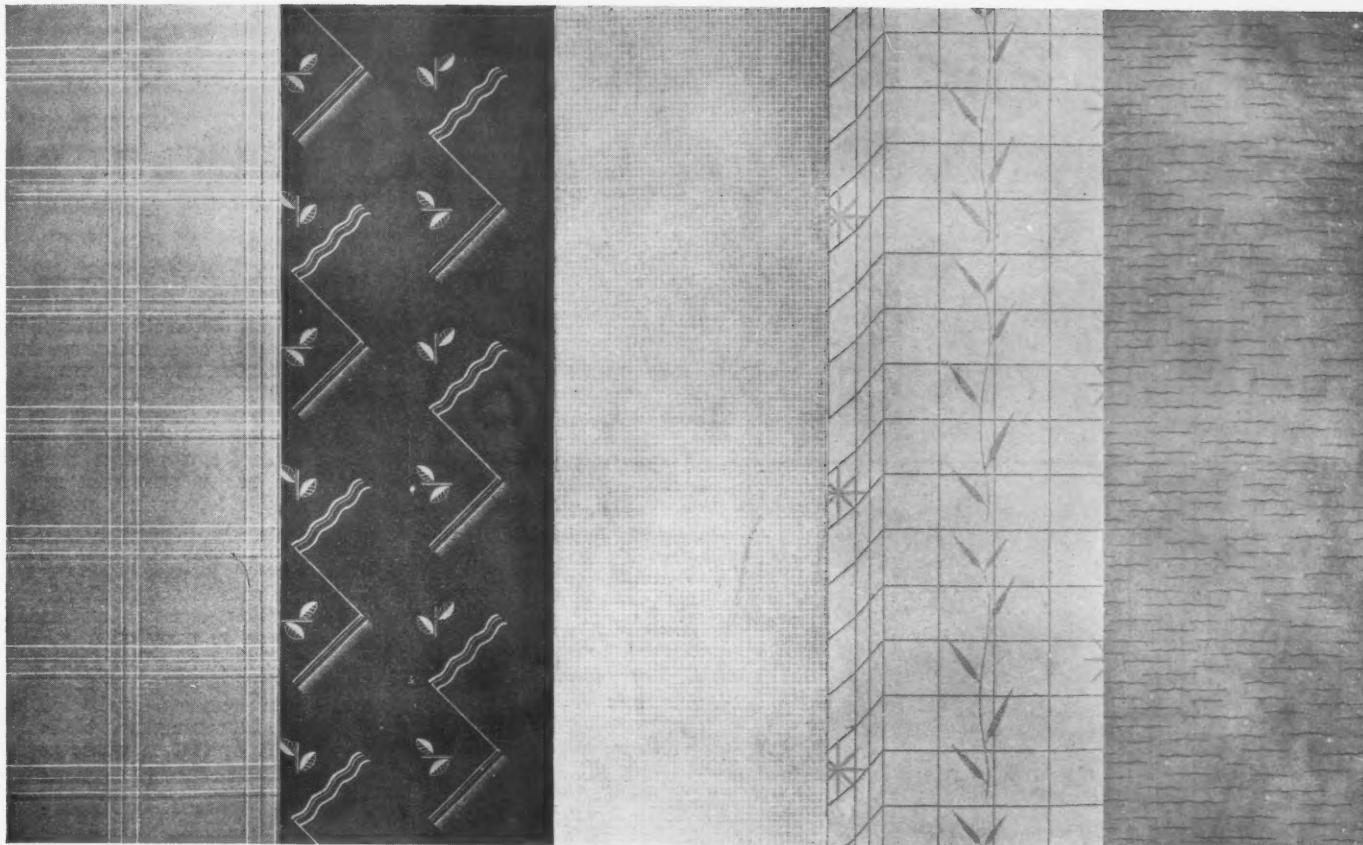
Plain Papers

Papers with absolutely plain surfaces are obtainable but not many are manufactured as they are difficult to hang without showing the joints, fading is more noticeable, and exact colour matching of quantities produced at different times requires the closest attention.

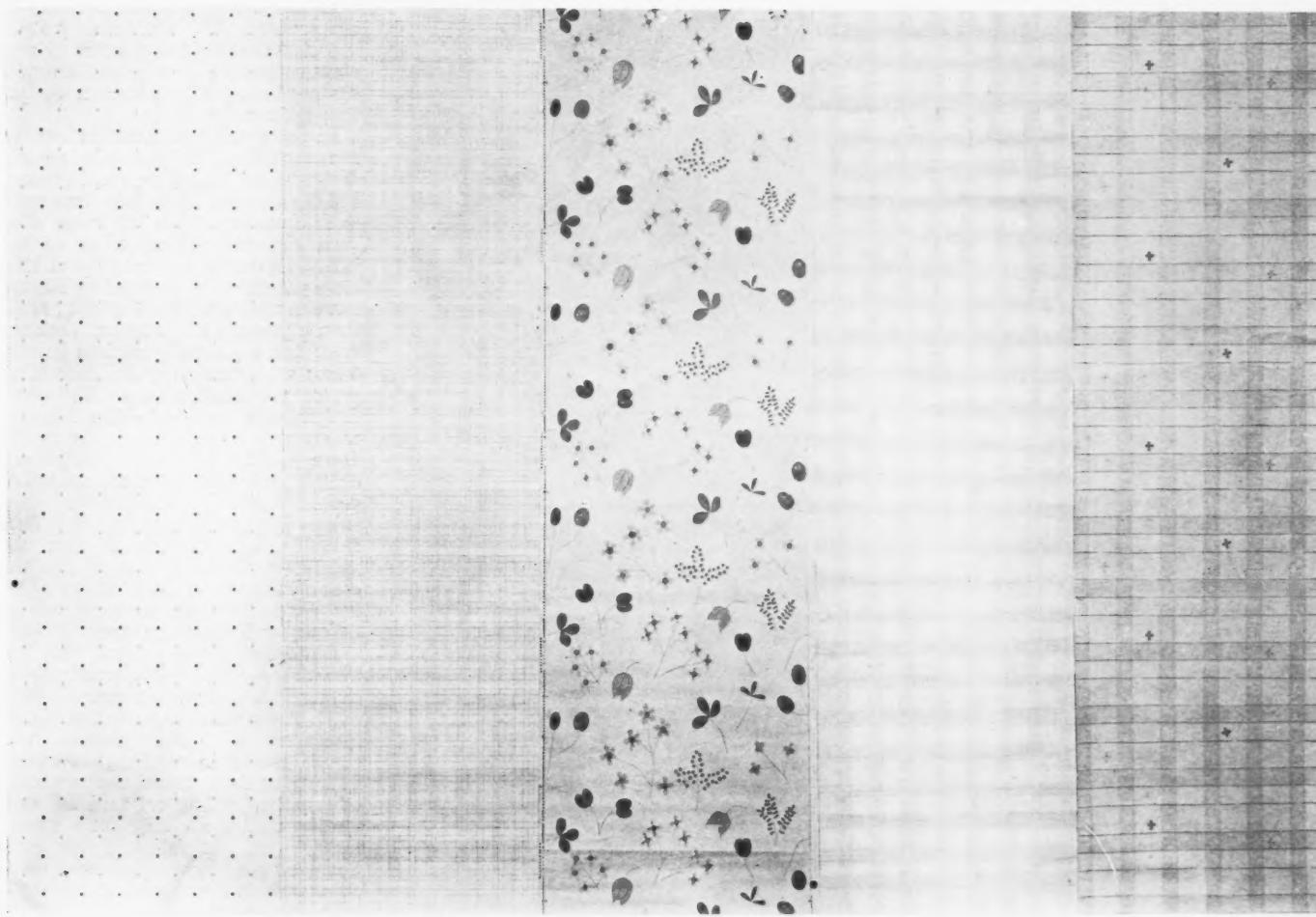
Embossing rollers are not often made in the wallpaper factory and are mostly imported from Germany from which country some of the designs originate, others being produced to order. A considerable variety of texture can be obtained by adding colour which is impressed simultaneously with the embossing roller, sometimes with an underlying print. For heavier papers an additional backing is used which is stuck to the original at the same time as it is embossed.

A recent development in plain papers is the use of a heavy impasto of colour to give texture—a Continental innovation which in this country has principally been used to imitate (often very successfully) the texture of plastic paint.





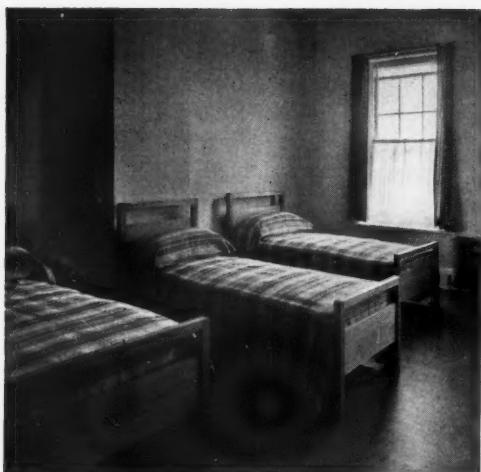
3



4

Some concession to period precedents may be necessary in catering for the small market for hand block-printed patterns, but this still leaves scope for original design. On the opposite page are shown several from a series of designs by Edward Bawden and John Aldridge put on the market this summer. 1, "Rose" by Edward Bawden.

2 (left to right), "Royal Oak" by John Aldridge, "Flute" by Edward Bawden and "Lace," by John Aldridge. 3, patterns from a series designed in 1933 by R. Y. Goodden; the first attempt to establish a standard of modern design in this country. Those illustrated in 4 are of German origin, produced cheaply under ordinary commercial conditions.



5



6

5, a simple patterned paper used in the London Transport Convalescent Home at Hythe, a scheme designed by Gordon Russell. Such a room provides obvious scope for the element of gaiety which wallpaper can introduce. 6, a wood veneer paper used on the walls with a

patterned ceiling and frieze, the latter one of the patterns designed by R. Y. Goodden shown on the previous page. The interior was carried out by Gordon Russell for Garrards the clock-makers and shows the flexibility of wallpaper as a decorative medium.

WALLPAPERS IN USE

Wallpapers for

"Wallpaper, that old exponent of disgusting designs, has declined in popularity and become a standing joke merely because the manufacturers lack the initiative to introduce patterns which because they stray a little from the accepted flowery groove may be a slight commercial risk" This complaint made by a modern architect writing in THE ARCHITECTURAL REVIEW of February, 1932, remains substantially true today, for modern designs in wallpaper which can be obtained in this country are almost entirely the work of Continental manufacturers and designers.

The earliest attempts at modern design (as in so many other spheres) originated from the Bauhaus, and these set a contemporary standard which was followed in Germany by the N.D.K. papers, the latter being available in this country. A Swiss firm whose papers are also obtainable in this country has produced some intelligent patterns printed in oil colours which are fadeless and can also be scrubbed with a brush using soap and water. Papers printed with metallic colours come from the same source. This gives a silky sheen and while the temptation to produce very effective imitations of period brocades has not been resisted, modern designs have been produced.

In this country co-operation between manufacturers and the best modern designers has been almost non-existent, and the attempts which have been made to influence standards has more often been the independent effort of the individual designer. In 1932 and 1933 some patterns were designed by Edward Bawden which, without departing much from eighteenth and nineteenth century types had a genuinely modern flavour. These were printed by the litho offset process in small sheets. His recent designs, and those by John Aldridge which were exhibited recently at the Little Gallery, are block-printed and exhibit a careful study of this method of production and its particular characteristics. Block-printed wallpaper is considerably more expensive than the machine product and it is perhaps the consideration of the likely market which has dictated a slight over-emphasis of delicacy and charm in these designs.

Apart from single patterns here and there the only other wallpapers of a generally modern character are some designed by R. Y. Goodden, himself an architect. Variations of check patterns and simple motifs in subdued colourings indicate, in these papers, the possibility of modern wallpaper patterns but, unaccountably, no large-scale manufacturer has yet followed this lead. Some few good patterns have crept on to the market in recent years and in some cases a tradition in the production of good period patterns has persisted, but generally speaking present-day manufacturers are all too ready to satisfy the demands of an ephemeral Mayfair revival rather than make an intelligent attempt to keep pace with the advancing field of modern design in co-operation with the modern architect; nor, one

for modern use

might add, has such co-operation in other trades in recent years always been unprofitable.

To suggest not only the type of design which is necessary but also suitable methods of using wallpaper one must first separate its function as a background for furniture, fabrics and pictures from its possibilities as mural decoration. The method common among manufacturers of covering plain textured papers with appliquéd motifs, corner sprays, panelled and cut-out borders and suchlike irrelevant decoration shows how little this essential difference has been grasped. Some commercial designs such as scenes with ships or extensive floral and landscape effects, which run round above the dadoes of billiard halls and hotel lounges, although lacking in originality, at least recognize their function as mural decoration in a room which demands or can accommodate it. There may indeed be a field for the mass production of mural designs supplied in lengths of wallpaper for which many eighteenth-century patterns have set a precedent, but the main function of wallpaper as a general background is likely to remain predominant. It is untrue to suggest that the present trend of modern architecture prohibits the use of a patterned wall surface, for provided the colour tones used are not strongly contrasted there is considerable scope for the imaginative designer. A great variety of texture in plain embossed papers is now to be had, though unfortunately many of these still contrive to be vulgar and strident. It would be unnecessarily purist to condemn the practice of imitating the texture and surface aspect of other materials by this method, and some embossed wallpapers such as a canvas texture, provide a background eminently suited to the modern room, but taste and discrimination are no less necessary in the production of an embossed plain paper than in a pattern. It is interesting to note in this connection the success with which manufacturers have imitated the grain of various woods. It is important if such imitations are to be used that the actual wallpaper substance should not be disguised by veneered or composition mouldings, added in an attempt to imitate an actual panelling scheme.

The cheapness of wallpaper and its ease of application on to almost any wall surface lends itself to more adventurous treatment than a mere covering of all the walls of a room in a single pattern. Space division can be suggested or emphasized by different shades of plain paper and a patterned paper on one or more flanks can be more effectively displayed with a plain paper on the remaining surfaces (see illustration opposite).

For entrance halls, nurseries and other rooms in which furniture and fabrics do not play a large part a bolder pattern can be used. Merely to fall back on a plain painted surface is an admission of defeat on the part of the interior



7



8

7, an entrance hall with a pattern of spots effectively linking the various wall flanks. 8, a dining-room by

Gordon Russell. A simple pattern of curves provides a contrast to the straight lines of the furniture.

designer, for wallpaper can clearly provide a decorative element different in character from any other decorative feature.

Technical advances in the production of fadeless and washable papers are being made, and the gradual maturing of modern architecture as a distinctive style has resulted in a greater flexibility

in interior decoration. Wallpaper as a mass produced material is modern in this respect and being the cheapest available material for the purpose which it serves, is likely to persist for domestic use: co-operation between manufacturers and designers to supply the right type of modern wallpaper is therefore urgent.

Other Materials

Lincrusta

This is a plastic material from which a relief ornament is pressed. The basis is linseed oil, which is oxidized in a large cylinder and then allowed to cool, forming a jelly-like substance. Mineral and vegetable fillers, such as whiting, lithopone, China clay, corndust, wood flour and Kieselguhr are added with any necessary colouring pigments. Waxes and resins are also incorporated to give ease in running. The mixture is then kneaded and rolled and finally minced. It is then coated on a paper backing and while soft passed between an engraved and a plain roller to receive the relief pattern. Any kind of painted finish can be applied when the material is hung. Its most common form since 1870, when it was first produced, has been as an imitation of oak panelling, and stained and varnished in a good rich brown it has persevered on the dadoes of countless pubs for over fifty years. It has good sound absorbent qualities.

Heavy relief papers

There are many varieties of papers in heavy relief, mostly embossed from paper stock while in a plastic condition. The water is extracted by pressure applied on the embossed roller and plain roller with a thick cushion of web felt in between. The embossed paper is then dried and sized. As a material, it is chiefly used to produce imitation plaster ceiling patterns of a Jacobean type, but it can well be used to give a light texture where a more durable material is required than an ordinary wallpaper, and is a good covering for cracked or damaged walls.

Lancaster cloth

This is a muslin base impregnated with linseed oil compound. A slight texture can be obtained and generally the surface is similar to paint, being equally washable. It is extremely pliable and is easy to hang. A number of plain shades can be obtained, but patterns available are rarely more than a reproduction of everyday wallpaper patterns.

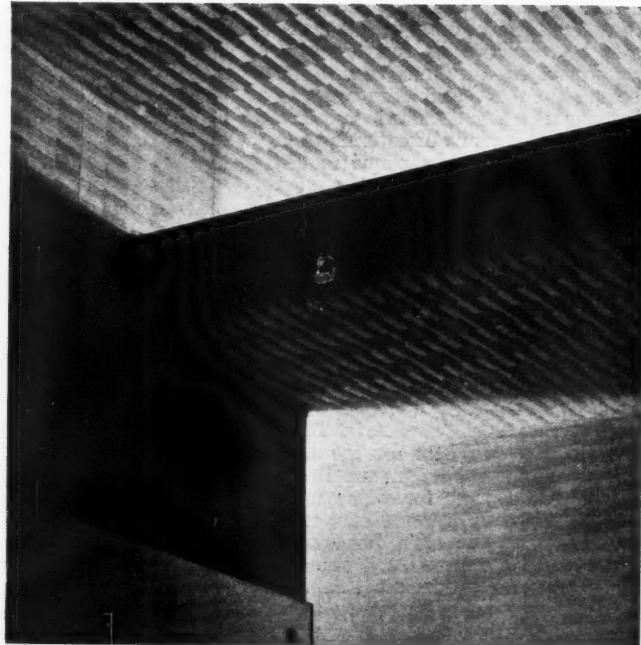
Wood veneer papers

Many types of wood veneer mounted on a paper backing of some sort are manufactured. One kind imported from Japan is an extremely thin peeled veneer which has been in use for some time for covering boxes. The small size of the sheets available usually dictates a squared pattern with the grain running alternate ways. Other types have a thicker veneer

on a paper backing and require a particularly strong adhesive and careful hanging.

Grass cloth

This is the bark of the Honeysuckle which grows on the mountains in Japan. The vine is gathered, torn in fine strips and woven in 7½ yard lengths on old-fashioned hand-looms by peasant workers. It is then backed with paper and stained. Its material, colour and texture make an extremely good background for modern rooms, and of all the materials dealt with in this supplement has been the most widely used by modern architects. Various skilful imitations of its texture have been produced in embossed papers.



9



10

9, Lincrusta, in a special design by Raymond McGrath used in the B.B.C. building. The pattern was designed to reflect light in addition to its acoustic qualities. 10, Japanese grass cloth used in the living-room of a house in Bayswater, architect Denys Lasdun. Its especial advantage here is as a background for pictures and objets d'art.

A Cottage Ornée for Mr. Jorrocks

By the greatest good luck in the world, Diana Lodge, within a stone's throw of the kennel, came vacant this morning, and not having the slightest doubt that on inspection of the accompanying list of subscribers to the hounds and members of our celebrated hunt, which you will see by the letters A. and B. prefixed to their names, contain very few of those most horrible characters water-drinkers from choice, you will immediately accept the honourable office of "Master," I have engaged it for you at the very moderate rent of four guineas a-week, *including everything*. It is a cottage ornée, as you say in France, entered by an ivy-covered trellis-work arch, tastefully entwined with winter roses, now in full blow. In the passage is a highly-polished Honduras Mahogany table on claw feet castors, for hats, whips, gloves, cigar-cases, &c. On the right is a dining-room of comfortable dimensions, with another Honduras mahogany table, capable of dining eight people, the orthodox size for a party, with a Honduras mahogany cellaret sideboard with patent-locks, and a dumb-waiter on castors. The carpet is a Turkey one, and the rug a Kidderminster, of a pattern to match the carpet. On the left of the passage is a drawing-room of the same size as the dining-room, furnished in a style of unparalleled elegance.

The chairs, ten in number, are of massive imitation-rosewood, with beaded and railed backs and round knobs along the tops, and richly carved legs. In the centre is a beautiful round imitation-rosewood table on square lion-clawed brass castors, and the edge of the table is deeply inlaid with a broad circle of richly-carved, highly-polished brass. Against the wall, below a costly round mirror, supported by a bronze eagle in chains, is a square imitation-rosewood table inlaid with satin-wood in lines containing two drawers on each side, with ivory knobs for handles. The carpet is a fine flowered pattern, richer than anything I can describe, and the whole is wonderfully complete and surpassingly elegant.

There are four bedrooms, and a dressing-room which holds a bed, and a kitchen, back-kitchen, scullery, pantry, and other conveniences. To the back is a nice little outlet of a quarter of an acre, laid out in the style of the *Jardin des Plantes* at Paris; and there is a splendid old patriarch of a peacock, that struts about the walls, spreads his tail, and screams delightfully. In short, it appears to me to have been built with an eye to the residence of a master of hounds.

SURTEES.

*A Letter from Miserrimus Doleful, M.C.,
to Mr. Jorrocks. From "Handley Cross" 1843.*

Graphite, Dryad, Gunmetal, Vogue and Copper Stain. If our paint manufacturers' adopt this sort of inspiration the interior decorator's life will be more impossible than ever.

Art for the General Public

For some years the exhibitions organized in the provinces by the Institute of Adult Education have been filling a big gap without getting much praise or publicity. Their object has been to show loan collections of good representative contemporary art in places that otherwise have no opportunity of seeing contemporary art at all. Now for the first time the Institute has turned its attention to London, feeling presumably that even London may suffer from a dearth of good pictures now that public galleries are closed, and that in these difficult times the ordinary man or woman (as distinct from the connoisseur or professional critic) must be finding it even more difficult to find opportunities for looking at pictures.

So the chief points about the exhibition of English and French paintings organized by the Institute, which was opened on November 15th by Sir Kenneth Clark, are: that it is near the centre of business London (at the City Literary Institute, Stukeley Street, Holborn), that it is free and that it is open till eight o'clock every night and on Saturday afternoons.

The pictures on view are all borrowed from private collections or from the artists. They are intentionally miscellaneous and illustrate no consistent viewpoint; but because of their source there is some unity in the collection as a whole, representing as it does the taste of the fairly orthodox well-to-do English collector of the post-1918 years. Though orthodox from the point of view of the most progressive movements of today it is sufficiently adventurous and stimulating to serve its purpose very well of giving the general public an opportunity of widening the scope of their own likes and dislikes about art.

The exhibition contains sometimes distinguished, and at least typical, examples of the work of Sickert, Augustus John, Spencer Gore, Raoul Dufy, Peploe, Wyndham Lewis, Gertler, Paul Nash, Stanley Spencer and many others. It will remain at the City Literary Institute until December 20th, after which it will go south of the river to Morley College.

New Development

A recent report (October) of the Council for the Preservation of Rural England states that all Ministry of Health official inquiries into planning schemes have been cancelled and adds "it is feared that advantage may be taken of the position to consolidate arrangements for large-scale development in the future which in normal circumstances would never have received permission. As an example the Council have been notified recently of grandiose proposals for development in the neighbourhood of Ditchling Beacon, Sussex, and have made representations to the East Sussex County Council and the Chailey Rural District Council accordingly." The example quoted is obviously of a kind that

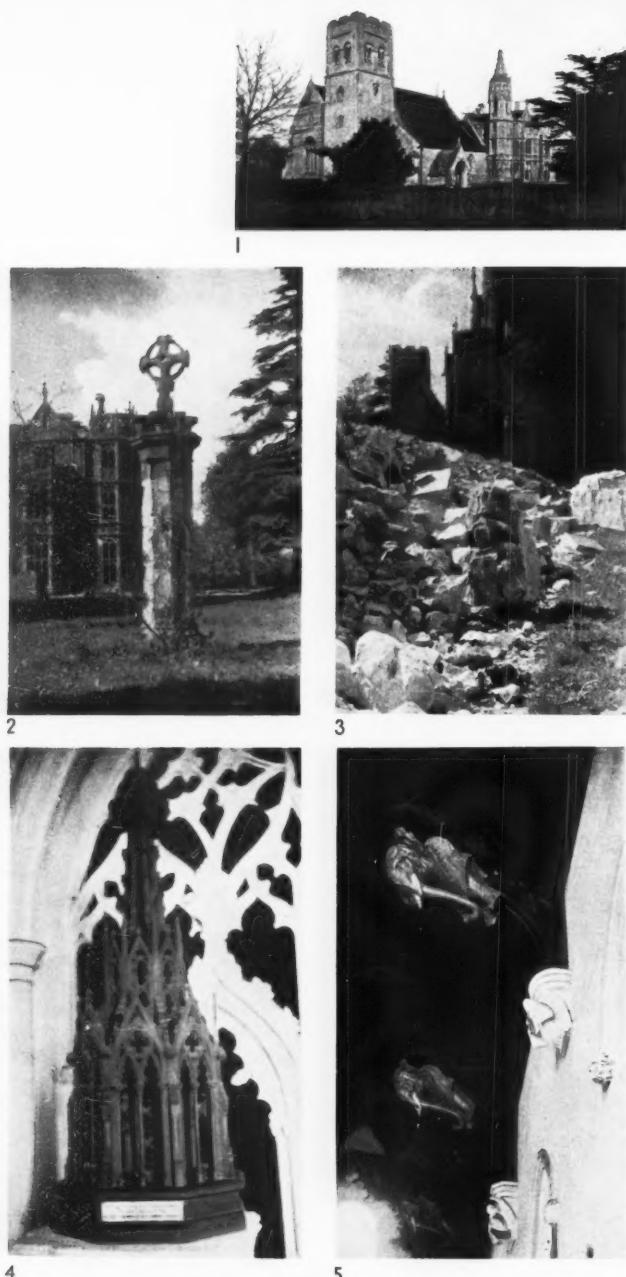
MARGINALIA

Thank the War

Although the war has brought almost all private building activity to a stop (or, put from another point of view, in the words of the Georgian Group's recent announcement, "now that the usual threats to Georgian buildings are in abeyance") architects and builders can find a little consolation in considering some of the benefits that the exigencies of war-time may bring to their peace-time occupations.

The most notable of these come under the heading of standardization. The unnecessary multiplication of patterns and shapes when one would serve tends to disappear when all

output is restricted, and the sensible future when a lot of design is done in prefabricated units seems to be brought appreciably nearer. But one sphere in which more specific progress can be recorded is that of colour standardization. We are told that for the first time there is now an official khaki shade, to take the place of the dozens of shades varying from a warm brown almost to a bright green that previously went under that name, even for official purposes. And during the past month the British Colour Council (through their Hosiery Advisory Bureau) have issued a list of ten shades which they advocate as a complete range of colours for silk stockings.



A remarkable collection of Gothic Revival remains, to be found in the village of Wickham, Berkshire, is described on this page under the heading "The Gentleman Collector." 1, the village church and rectory, the latter having a tower modelled on that of the Jacques Cœur house at Bourges. Its spire, shown in the photograph, has recently been pulled down. 2, one of the octagonal piers which stand in the rectory garden. 3, the ruins of the vineyard, only pulled down last spring. 4, the font-cover in the church, acquired by a previous rector from the Great Exhibition of 1860. 5, oddest of all, plaster elephants ornamenting the hammer-beam roof brought by the same eccentric gentleman from Paris.

A BERKSHIRE MISCELLANY

should be carefully watched but one may take comfort in the thought that development of almost any kind (except the numerous camps dumped throughout the country whose temporary nature is always a little suspect)

is likely to cease for the duration. Indeed if the war lasts as long as some of the less sanguine experts have prophesied we may have seen the end of suburban and ribbon development as we know it.

The Gentleman Collector

One of the most extraordinarily miscellaneous collections of Gothic Revival architecture is to be found at Wickham, near Lambourn, in Berkshire, of which some photographs are here reproduced. It is not on a large scale nor is it well known, but both the rectory and the church of St. Swithun will surprise the visitor. The rectory itself was changed from a decent 18th-century red brick house into a 15th-century building as late as the middle of the last century. But even then it was gothicized rather in the spirit of Horace Walpole than of Pugin.

In the garden stand two octagonal piers, one of stone, one of chalk; the one crowned with a group of 13th century capitals and the stone cross which surmounted the spire at Welford, the other with a large vase-shaped stone and another cross. Both these are well placed and still give the exact effect intended when the garden was laid out.

Nor does the rectory itself, with a tower copied from the house of Jacques Cœur at Bourges, until recently capped by an ornate stone spire over a hundred feet high, lack distinction.

It is, however, the church itself that deserves most attention. Except for an untouched tower which dates from Saxon times, nearly everything is due to the restoration, or rather rebuilding, that took place in 1843. It is said, though, that the Jacobean pulpit is still to be found, mutatis mutandis, as a cupboard in the servants hall at Wickham House.

Yet even here the wide cultural interests of the incumbents have managed to relieve the pure neo-Gothic aridity. For instance, the font, which might be described as "modern and ornate," has a magnificent cover, which was exhibited at the Great Exhibition of 1860 as a specimen of what New Zealand could accomplish in woodcarving.

There used also to be a vineyard, built almost with the vigour of a Paxton, the back wall containing six large three-light windows. Five of them were genuine 15th-century relics, taken from the neighbouring church at Welford, which also contributed a 13th-century triplet and a 15th-century doorway. Unfortunately this growing vineyard has been demolished and most of the glass now lies scattered on the lawn.

The late rector's interests as a gentleman-collector were not, however, confined to English exhibitions, and his visit to the great Paris Exhibition resulted in one of the most startling effects to be found in any English church. In the north aisle, counterbalancing the stock figures of angels in the nave, the hammer-beams of the ceiling are ornamented by elephants' heads. They are of plaster, are gilded, and number eight in all.

They must, even at the date of their installation, have always produced a somewhat bizarre effect; but, to a generation that knows negro spirituals only too well, the similarity of their ears to the angels' wings endow them with an unexpected quality of simplicity and piety.

A. R.W.

Wisbech

The photographs illustrating the article on Wisbech in this issue were taken by the author, by John Piper

and by Messrs. Ream. The panoramic drawings of the North and South Branks, reproduced on pages 239 and 241, are by John Piper. The photographs showing Wisbech as it was eighty years ago are by courtesy of the Wisbech Museum. Plate v, showing the drawing-room mantelpiece at Bank House, is given with the kind permission of the Hon. Alexandrina Peckover, the owner of the house.

Wallpapers

We are indebted to Messrs. Gordon Russell for the photograph of German wallpapers on page 255 and to the Little Gallery for those illustrating papers designed by Edward Bawden and John Aldridge on page 254 of the Wallpaper supplement in this issue.

CORRESPONDENCE

The Editor,

THE ARCHITECTURAL REVIEW.

SIR,

I was unable to observe at first hand the reactions of our young, middle-aged, elderly and senile architects to the visit and the engaging outspokenness of Mr. Frank Lloyd Wright, because I had sailed for the U.S.A. a few days after he arrived in England. I may say that I was eagerly questioned about those English reactions by architects in New York, Los Angeles and San Francisco: they had an idea that Frank Lloyd Wright would stir things up a bit. Apparently he did, and with that wicked American cunning he disclosed the innate conservatism of all generations of English architects. The die-hards of functionalism seem to have risen beautifully: of course, we all know that they despise humanism — which they label romanticism — but the special genius of Frank Lloyd Wright made it sun-clear to all the world that their crabbed contempt for humanistic values was a deplorable defect. What I suppose they found harder to forgive, was the fact that Mr. Wright outgrew all that mechanistic stuff when our bright young modernists were still in their cradles.

What a tragedy it is that we have no Frank Lloyd Wright in this country, and that we've had to adapt alien ideas from Europe and subdue our own rich common sense about climate and comfort.

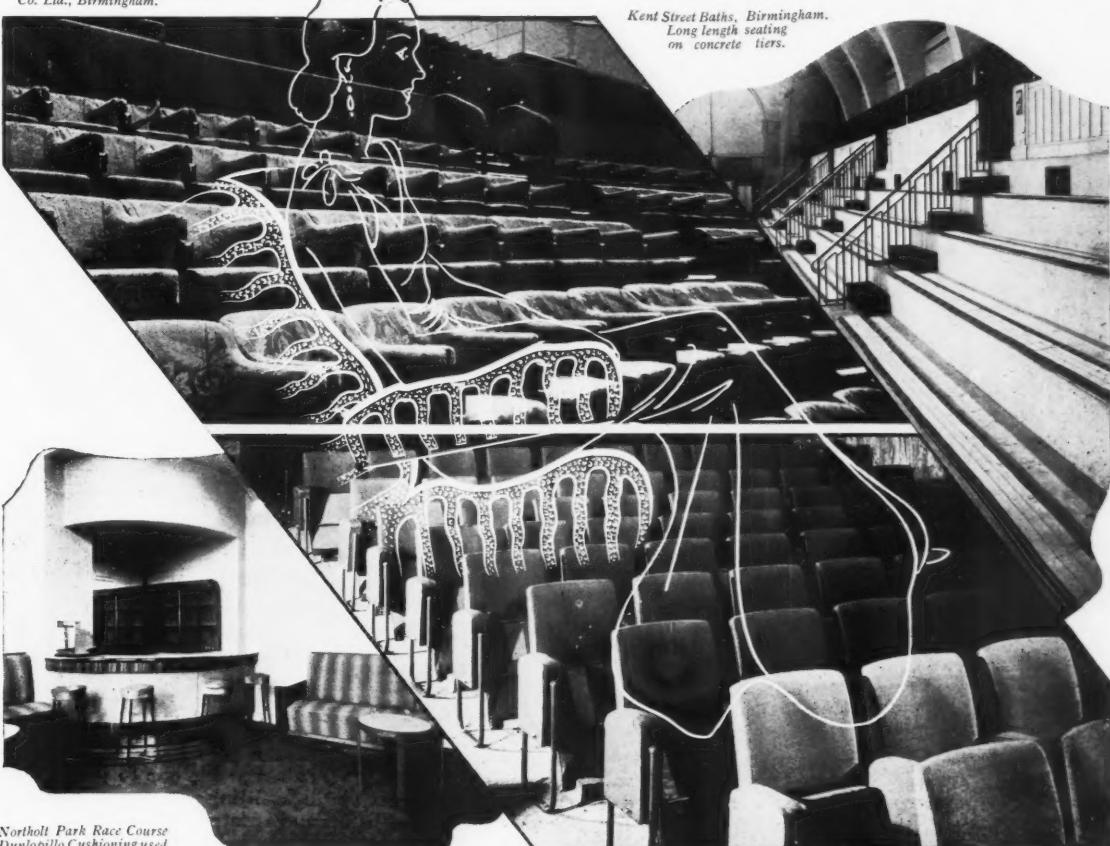
I have had some small opportunity of studying the influence of Frank Lloyd Wright in America; and it is a healthy, natural and splendidly inspiring influence, without any tedious creeds hanging on to it, and without the shadow of that bearded bore, Karl Marx, blurring the clear, sweet sense of his ideas about buildings for human beings to use.

I gather that only the bright young moderns took any real notice of Mr. Wright's views: I suppose some of the others turned in their sleep, but thank the Lord the young men did realize that something big had come their way, which had to be noticed: it wasn't altogether their fault if they misunderstood him — they've been frowning with Continental fancies too long. But they were all glad he came: I for one hope he'll come again to wake us up. Hail Columbia!

Yours, etc.,
JOHN GLOAG.
East Sheen, S.W.

DUNLOPILLO CUSHIONING

Gaumont Cinema, Haymarket, London.
Luxury armchair seats in the Royal Circle
upholstered with Dunlopillo Cushioning
Seating Contractor : W. W. Turner &
Co. Ltd., Birmingham.



Northolt Park Race Course
Dunlopillo Cushioning used
in Restaurants, Bars, Tea
Room, on fixed seating,
cocktail stools,
Schemes, Decorations and
Furnishing by Bovis Ltd.

Royal Institute of British Architects.
Architect : G. Grey Worman, Esq., F.R.I.B.A., Seating Contractors : Cox & Co., Bushey.
Seating in the Henry Jarvis Memorial Hall upholstered with Dunlopillo Cushioning.

*-the modern principle of seating
for*

Dunlopillo Cushioning brings advantages never before combined in any seating material. It provides a definite advance in comfort; its resilience is lasting; it does not become flattened or uneven and never needs attention or repairs; it is odourless, damp-proof, moth and vermin-proof and substantially germ-proof; there is indisputable evidence that it improves acoustic absorption; it is made in moulded units ready for fixing and involves the minimum upholstery work; it is being increasingly used in public buildings, cinemas, theatres, sports' arenas, hotels, clubs, churches, etc., throughout the world in all climates, in the form of tip-up chairs, long length seats, wall seats, upholstered seats and chairs, etc.

Dunlopillo Cushioning is also being increasingly used for A.R.P. work, sound-proofing and draught exclusion on doors. Full details will be sent immediately on request.

MAXIMUM
COMFORT
ECONOMY
HYGIENE
ACOUSTICS
advantage

DUNLOP RUBBER CO., LTD. (General Rubber Goods Division) Cambridge Street, Manchester, 1.

9DP4/18.

Trade News and Reviews

By
BRIAN
GRANT

Design for Light at the Lighting Centre

THE somewhat strange-looking contraption at the head of these notes is the "Aladdin's" lamp in the recent Troughton and Young showroom extension—a brisk rub, and your wish is fulfilled. Well, that is more or less how it works.

Though the object in the photograph closely resembles a helping of soup served up in Susie Cooper pottery it is, in fact, the control table operating the whole of the lighting effects throughout the showroom. In the centre of the table is the showroom key-plan encircled by a series of 60 switches. On the plan you note the key number of the particular light fitting or lighting effect you wish to look at, press the switch bearing the same number and—well, that's all there is to it. Simple but ingenious.

What this new Lighting Centre showroom lacks in size it more than makes up for in ingenuity. Every lighting fitting showroom must inevitably be prickly with fittings—ceiling fittings, wall fittings, floor standards and table lamps—so that the effect *en masse* is bound to be a little disconcerting to the would-be purchaser.

One sees so much all at the same time that it is often difficult to make up one's mind how much one likes or dislikes any particular single fitting. Again, there is the difficulty of trying to imagine just how the fitting might look in different settings and against different backgrounds.

The extraordinary flexibility of electricity as a light medium adds to the complexity of the showroom designer's problem. There is so much he would like to do in the limited space available, and ultimately he is compelled to squeeze a pint into a half-pint pot with the best possible grace.

The new extension at the Lighting Centre is modest in size but, thanks to the ingenuity of A. B. Read, it is a great asset to the existing showrooms. With more than a little success has he overcome a fundamental difficulty by contriving to have innumerable lighting fittings on show in such a way that each one can be appreciated without interference from the others.

Several interesting structural details contribute to this. The whole of one wall is composed of panels which jut out

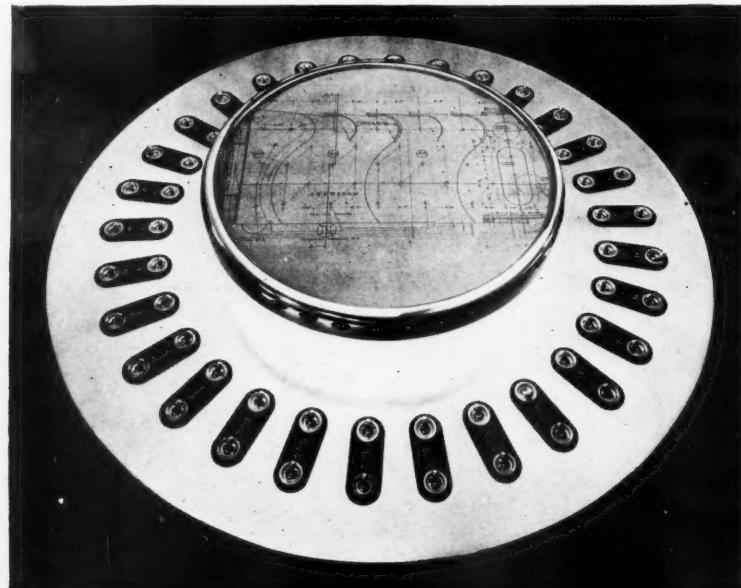
at a slight angle. The ceiling is on four different levels, representing various heights of ceilings in houses and flats.

Four movable vertical screens, wedge-shaped in plan, and covered with a variety of finishes such as wood, wall-paper and paint, enable one to judge an individual light fitting against different backgrounds, and isolated from other fittings. Curved tracks in the ceiling allow all sorts and colours of curtains and fabrics to travel round and about the individual fittings.

The revolving corner (see illustration) is an additional piece of cunning. Altogether an exhilarating and intelligent bit of showmanship. The sort of thing we have learned to expect from Troughton and Young.

New Y.W.C.A. swimming pool

The Duchess of Kent, Honorary President of the Y.W.C.A. Central Club, officially opened the Club's new swimming pool early in May. Under-water lighting of the pool is by twelve 300-watt Benjamin



►MANY TIMES IN HISTORY ARCHITECTURE HAS BEEN RE-FASHIONED
►STYLE GIVES BIRTH TO STYLE ►THIS IS THE ONLY LIVING CONTINUITY

To-day we recognise the beginning
of a new phase in the
English tradition

M.A.R.S. GROUP, 1938

As the result of the far-reaching developments which have taken place in the production and uses of light, strong aluminium alloys, architects now have a medium which gives new direction to their creative expression. Already there is evidence of a new phase in architectural design made possible by this versatile metal.

Aluminium is strong, cannot rust, never streaks nor stains adjoining surfaces, does not warp, and holds paint better than wood, iron or steel. In anodised finishes, it is making possible new design-forms, new colour effects and new decorative refinements. Aluminium is the metal which is receiving increasing attention on the drawing boards of the architects of England.

● Consult our Advisory Service for technical data on the use in architecture of aluminium and its alloys.

NORTHERN ALUMINIUM Co. Ltd.

BUSH, HOUSE, ALDWYCH, LONDON, W.C.2 • Telephone: TEMPLE BAR 8844 • Telegrams: NORALUCO, BUSH, LONDON
and at BANBURY, BIRMINGHAM, BRISTOL, COVENTRY, GLASGOW, MANCHESTER, NEWCASTLE-ON-TYNE & SHEFFIELD



Above, left, a detail of the enquiry bureau in the new Troughton and Young showroom extension at 143 Knightsbridge, S.W.1. Main lighting is from two large "Louverlux" fittings fixed flush with the ceiling.



Above, right, a revolving fitting in the showroom showing lighting units against various backgrounds.

reflectors set in flush lighting ports along the two side walls.

the Association at Gas Industry House, Grosvenor Place, S.W.1.

•
Sterilization is by means of ozone, which is introduced to the pool through a flow pipe at the shallow end, and at the deep end through perforations in the terrazzo pool floor, a system providing complete sterilization and aeration of the whole of the water without any "dead spots." Bruce, Auld & Company were the contractors for the sterilizing installation. The architect for the pool was J. A. Hobbs. The National Fitness Council contributed a grant of £2,000 towards its cost. A photograph of the pool is shown on the next page.

Through the letter-box

"This made a New World"—the story of town gas. The British Commercial Gas Association in this entertaining little yellow-backed book tell the story of progress in the gas industry. I think most of us have a great deal of admiration for Mr. Therm, he is such an untiring little fellow who really does seem to have the interests of his 11,700,000 customers at heart, and one is not surprised to find that he has made his story extremely readable. Copies may be obtained from

A Handbook on Paint. This is another most readable little book with short contributions by John Betjeman, who writes on "Colour and the interior decorator," and Hugh Casson who does not think that architects know very much about colour ("it is not his fault, for in the training of an architect the art of colour is almost entirely neglected"), and looks forward to the time when they may be able to understand and use colour, not as a disguise, but in its true value as an essential element of architecture. The book closes with a chapter of technical data. Publishers—The Silicate Paint Company, Charlton, London, S.E., who will be pleased to send copies to REVIEW readers.

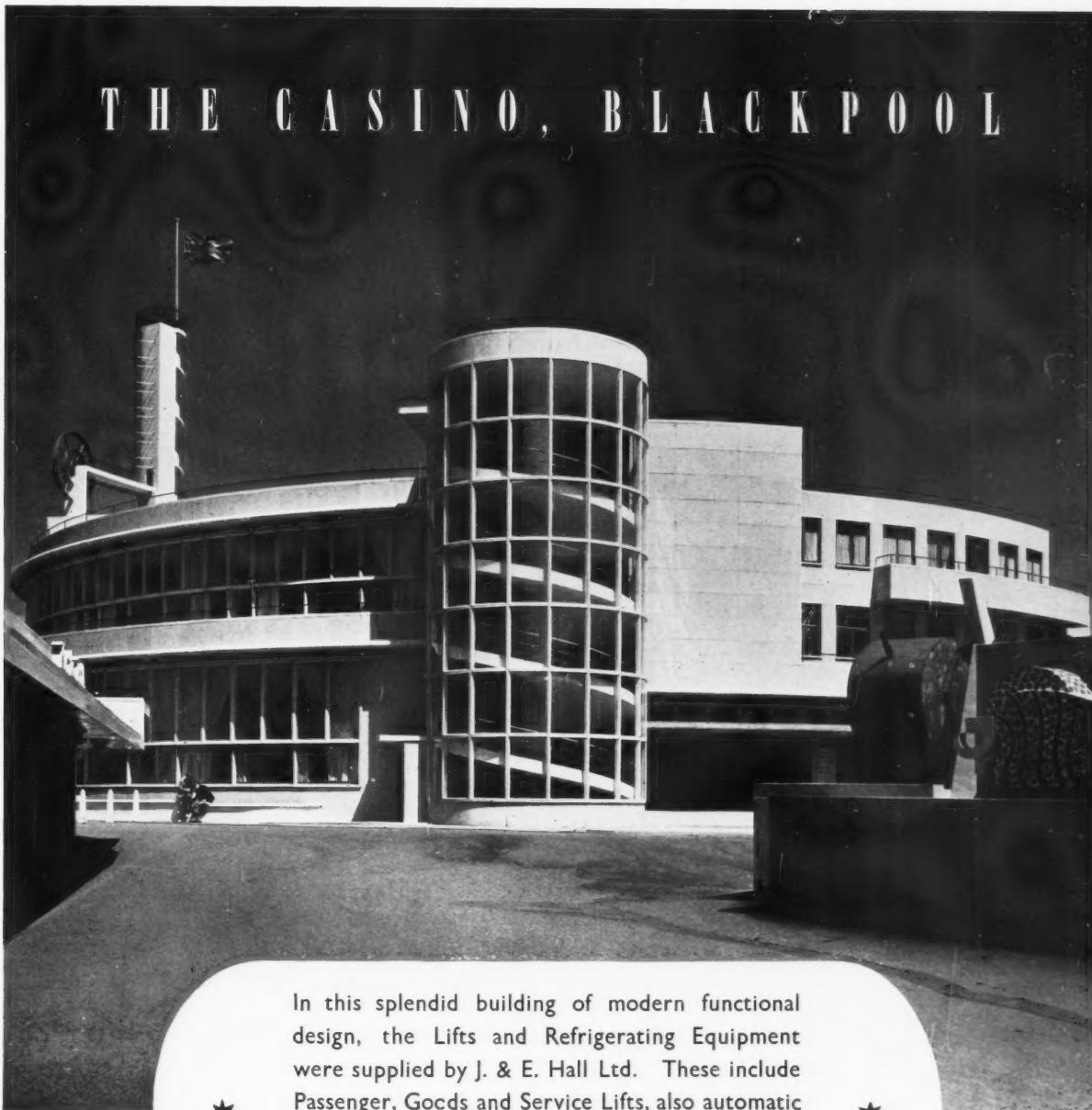
•
New G.E.C. Electric Exhaust Fan Catalogue. This is a plain catalogue with no frills. It serves, however, not merely as a price list covering a comprehensive range of ventilating equipment, but also as a technical guide containing much valuable information upon the subject of ventilation. Technical data and tables are presented in a sensible and simplified form enabling estimates to be made of

air performance under a variety of operating conditions without calling for any special knowledge of ventilating practice. Application for copies may be addressed to the G.E.C. head office, Magnet House, Kingsway, London, or to any of the company's many branch offices.

•
An Achievement in Structural Steelwork shows, in retrospect, many of the typical steel-framed buildings at the 1938 Empire Exhibition, Scotland. Today those same buildings are being dismantled and recovered "by methods as economic and systematic as those by which they were built." Practically all the large industrial buildings, including the tower and concert hall, at Glasgow were constructed in steel and many of them were erected in record time. Remembering the size of the exhibition and the amount of steel that was required for the making it is gratifying to know that the self-same steel, like the tent of the travelling showman, will see many another day in many another place. Copies of this brochure may be obtained from The British Steelwork Association, Steel House, Westminster, S.W.1.

•
Bakelite Veneers and Wall Panels. A brief and well illustrated brochure

THE CASINO, BLACKPOOL



In this splendid building of modern functional design, the Lifts and Refrigerating Equipment were supplied by J. & E. Hall Ltd. These include Passenger, Goods and Service Lifts, also automatic Refrigerating plant for beer-cellars cooling, and cold rooms for milk, fish and meat.

ARCHITECT: JOSEPH EMBERTON, F.R.I.B.A.



J. & E. HALL

L I M I T E D

LIFT, ESCALATOR & REFRIGERATING ENGINEERS
DARTFORD KENT

© 14.683



New swimming pool at the Y.W.C.A. Central Club, London, opened by the Duchess of Kent on May 8th. J. A. Hobbs, L.R.I.B.A., architect.

describing the application of bakelite veneer to plywood and laminated board, and the fixing of bakelite wall panels direct on to timber framework. Copies from Bakelite, Ltd., 40, Grosvenor Place, London, S.W.1.

The "Rondos" sump valve

This is a new patented device for measuring and controlling the water in water-logged soil surrounding a building. The sketch on the next page shows the

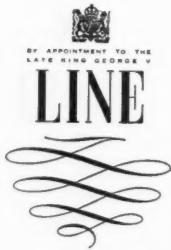
"Rondos" sump valve in position in an asphalt-tanked basement—the operation and main functions of this installation may be described as follows :—

When the water-level detector valve is opened the water from outside the building immediately rises through the main pipe until it reaches its own level, thus the point to which the water rises in the glass gauge-tube indicates the level of the outside water.

This means that a constant check can be kept upon the pressure of water in the sub-soil, and should this pressure become threatening or inconvenient it can be released into the sump through the large liberating valve and pumped away; the rate of flow through the valve may be adjusted to suit the capacity of the available pumping apparatus—the pump can be built in and coupled to an automatically operated float switch or a suction pump can be lowered into the sump when required.

Many advantages accrue from being thus able to check and control the water pressure. For instance, it greatly simplifies the task of locating and repairing any leakages that might occur in the basement wall or floor. In locating the point of leakage in the tanking the outside water is drawn off through the liberating valve until the level

JOHN LINE & SONS LTD • 213-216 TOTTENHAM COURT ROAD • LONDON W.I



Wallpaper Factory at
KENTISH TOWN • N.W.1

Branches at
B R I S T O L
B O U R N E M O U T H
R E A D I N G
M A N C H E S T E R
D O N C A S T E R
B I R M I N G H A M
N E W C A S T L E
E D I N B U R G H

WE ARE
CONTINUALLY
PRODUCING
NEW DESIGNS



SPECIAL COLOURINGS OF ANY OF OUR HAND-PRINTED WALLPAPERS TO ARCHITECTS' REQUIREMENTS

The Architect's Vision in Reality



Extension to Birmingham Co-operative Society's Dairy at Vauxhall, Birmingham

Chief Architect: W. A. JOHNSON, F.R.I.B.A.

Assistant Architect: C. L. PAICE, F.I.A.A.

REINFORCED CONCRETE

by

**STUART'S
GRANOLITHIC CO. LTD.**

ESTABLISHED 1840



FLOORS
in Situ & Pre-cast

REINFORCED
CONCRETE
Design and
Construction

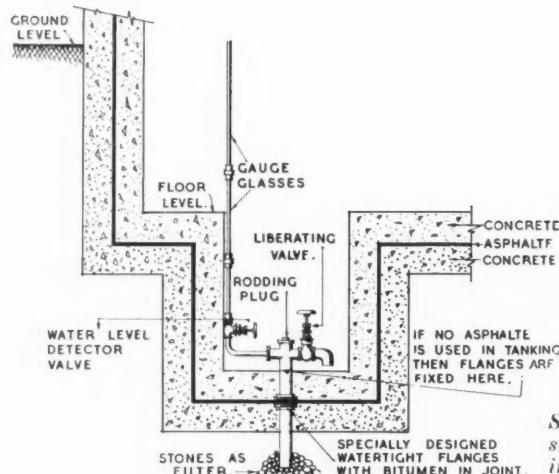
CAST STONE
STAIRCASES
GRANOLITHIC
PAVING

★ LONDON:
101 Baker Street, W.1.
Telephone: WELbeck 3775.

★ EDINBURGH:
46 Duff Street.
Telephone: Edinburgh 61506.

★ MANCHESTER:
Ayres Road, Old Trafford.
Telephone: Trafford Park 1725.

★ BIRMINGHAM:
Northcote Rd., Stechford.
Telephone: Stechford 2366.



Sketch of the "Rondos" sump valve in position in a tanked basement.

has been reached at which water ceases to enter the basement and by keeping the water constantly at this low level during the period of repair a perfectly dry basement is available and the repair work is carried out above water level. One can well imagine the saving in time, labour and therefore cost, that would in a great many instances be effected.

A.R.P.

The "Rondos" sump valve should be of

special interest to those concerned with the provision of adequately equipped basement air-raid shelters for it is claimed by the manufacturers that flooding can be prevented, or satisfactorily dealt with, whether it be "due to natural infiltration" or to more violent causes such as "burst or fractured water-mains."

The manufacturers and distributors are Messrs. Dyson, Nott & Partners, Ltd. of 17, King Street, St. James's London, S.W.1 to whom all applications for details should be addressed.

The Buildings Illustrated

Casino at Blackpool.

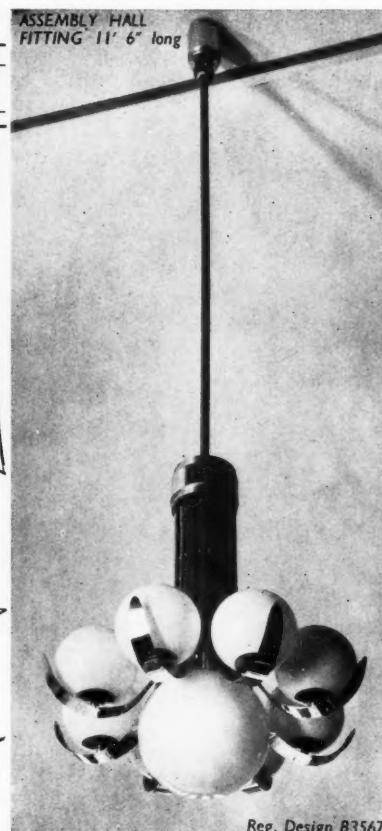
Architect : Joseph Emberton.

The general contractors were Blackpool Pleasure Beach Ltd. Among the subcontractors and craftsmen were the following :—Armstrong Cork Co. Ltd. (cork flooring), Taylor Pearce and Co. Ltd. (railing, metalwork, etc., door furniture), Baldwins (Birmingham) Ltd. (door furniture to offices), B. and B. Plastering Ltd. (granite), J. D. Beardmore & Co. Ltd., Bostwick Gate & Shutter Co. Ltd., Benham & Sons Ltd. (metalwork), British Vacuum Cleaner & Engineering Co. Ltd. (vacuum cleaning plant), Burn Bros. Ltd. (drainage), Carrier Engineering Co. Ltd. (ventilation and air conditioning), James Clark & Son Ltd. (glazing), Claude-General Neon Light Ltd. (neon installation), Drake & Gorham Ltd. (electrical installation), F. and E. Eastman Ltd. (tiling), Fenning & Co. Ltd. (terrazzo), Gaskell & Chambers Ltd. (beer services), Granwood Flooring Co. Ltd. (wood block flooring), J. and E. Hall Ltd. (lifts, refrigeration), Henry Hartley & Co. Ltd. (plaster), Haskins (shutters, blinds, etc.), Haywards Ltd. (roof lights, pavement lights), Horsley Smith & Co. (Floors) Ltd. (Murray end grain flooring) George Jennings (Lambeth) Ltd. (sanitary

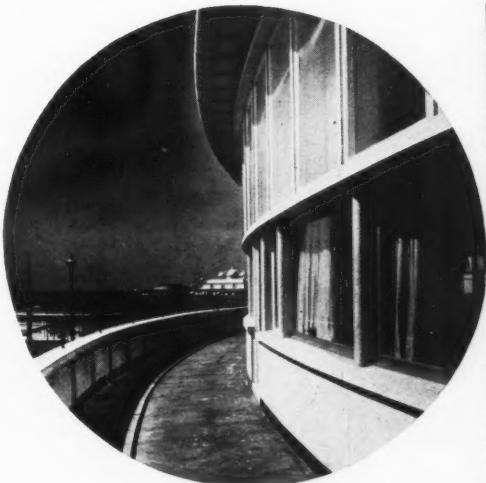
MA LIGHTING FITTINGS

USED EXCLUSIVELY THROUGHOUT
THE CIVIC CENTRE, TUNBRIDGE WELLS
Architects : Messrs. Percy Thomas & Ernest Prestwich

Architects' enquiries for special designs particularly invited to
**THE MERCHANT ADVENTURERS LTD.,
190 KENSINGTON CHURCH STREET, W.8.**



Reg. Design 835679



Blackpool Casino. Architect : Joseph Emberton, Esq., F.R.I.B.A.

SHOCKCRETE and the CASINO . . .

The above building is faced with SHOCKCRETE—a very high-class concrete manufactured under British Patent No. 427213. The main features of SHOCKCRETE are—great strength, maximum density and fine appearance.

SHOCKCRETE PRODUCTS (LONDON) LIMITED
STONE HOUSE, BISHOPSGATE, LONDON, E.C.2. Works : Rye House, Herts.
Telephone : Bishopsgate 7266.



The Entire Electrical Installation

at the BLACKPOOL CASINO

WAS CARRIED OUT BY

DRAKE & GORHAM LTD.

36 GROSVENOR GARDENS

LONDON, S.W.1

29 PICCADILLY

MANCHESTER

88-90 YORK STREET

GLASGOW, C.2

Also at HEREFORD, WINCHESTER, PLYMOUTH, WELLS and CAMBRIDGE.

Under the supervision of

Architect : JOSEPH EMBERTON, Esq., F.R.I.B.A., and Consulting Engineer : J. STINTON JONES, M.I.M.E., M.I.E.E., F.R.San.I., M.I.H.V.E.

TRADE AND CRAFT

fittings to flat), M. J. C. Johanns (bronze windows), Knight & Co. (Engineers) Ltd. (rising stages), Limmer & Trinidad Lake Asphalt Co. Ltd. (asphalt), Matthew Hall & Co. Ltd. (plumbing), E. Pollard & Co. (cash desks), Shanks & Co. Ltd. (sanitary fittings), Strand Electric & Engineering Co. Ltd. (stage equipment), Thonet Bros. Ltd. (chairs, tables), Trussed Concrete Steel Co. Ltd. (reinforced concrete structures), Palorit Paints Ltd. (Tyloglaze finish in staff lavatories), Western Electric Co. Ltd. (loudspeaker equipment), Hall & Dixon Ltd. (stage curtains), J. Starkie Gardner Ltd. (magic doors), Architectural, Constructional & Electrical Utilities Ltd. (light fittings), J. Avery & Co. Ltd. (office curtains), Horace W. Cullum & Co. Ltd. (acoustic plaster), Danks (Netherton), Ltd. (boilers) Fletcher Russell & Co. Ltd. (coke grill), Fleetwood Trawlers Supply Co. Ltd. (flagstaff), B. Burkle & Sons Ltd. (doors, counters, panelling, etc.), Liquid Carbolic Corporation (Philadelphia), (snack bar and soda fountain), Stanley Works (Connecticut) (magic door mechanism), T. H. Tonge Ltd. (banqueting hall tables), A. Davey (curtains and carpets), N. V. Schokbetone (concrete facing slabs).

•
Showrooms in Oxford Street.
Architect : Joseph Emberton.

The general contractors were Griggs & Son Ltd. Among the sub-contractors and

craftsmen were the following :—Demolition & Construction Co. (demolition and excavation), Trussed Concrete Steel Co. (reinforced concrete engineers, who were also responsible for all the reinforced concrete work), James Clark & Son (glass), Troughton & Young Ltd. (electric wiring), Curtis Lighting Co. of Gt. Britain Ltd. (electric light fixtures), Carrier-Ross Engineering Co. Ltd. (electric heating and ventilation), Burn Bros. (London) Ltd. (plumbing), Joseph Chater & Sons Ltd. (sanitary fittings), Taylor Pearse & Co. (door furniture), Crittall Manufacturing Co. Ltd. (casements), Haskins (rolling shutters), W. A. Telling & Co. (plaster), Fenning & Co. Ltd. (granite), Finmar Ltd., British Ideal Patents and Furniture Ltd. (furniture), E. Pollard & Co. Ltd. (shop fittings), Bennie Lifts Ltd. (lifts), Eric Munday (lettering), Smith's English Clocks Ltd. (clocks), Bull Motors (branch of E. R. and F. Turner Ltd.) (Bull super-silent motors), Pilkington Bros. Ltd. (glass bricks), Claude-General Neon Lights Ltd. (sign). Wm. Mallinson & Sons, Ltd. (special timber and veneer for wall-panelling).

•
House near Romsey, Hampshire.
Architect : Raglan Squire.

The general contractors were K. L. and H. N. Smith Ltd. who were also responsible for the bricks. Among the sub-contractors and craftsmen were the following :—Everseal Products Ltd. (special

roofings), James Clark & Son Ltd. (glass), Heat and Light (central heating), Aga Heat Ltd. (Aga cooker), Bratt Colbran Ltd. (grates), Edward Marshall Ltd. (sanitary fittings), Comyn Ching & Co. Ltd. (door furniture), Williams & Williams Ltd. (casements), J. A. Dean Ltd. (sun-blinds), A. Donovan Ltd. (doors), R. Cattle Ltd., Peerless Kitchen Cabinets Ltd. (joinery), Tile Decorations Ltd. (tiling).

•
House near Chester.
Architect : Raglan Squire.

The general contractors were H. V. B. Thorrington Ltd. Among the sub-contractors and craftsmen were the following :—Everseal Products Ltd. (special roofings), Colthurst Symonds & Co. Ltd. (spanish tiles), James Clark & Son Ltd. (glass), Ideal Boilers & Radiators Ltd. (boilers), Comyn Ching & Co., Ltd. (door furniture) Williams & Williams Ltd. (casements).

•
House at Brampton, Cumberland.
Architects : J. L. Martin and Sadie Speight.

The general contractors were J. and H. Bell Ltd. Among the sub-contractors and craftsmen were the following :—Ruberoid Co. Ltd. (special roofings, roofing felt), Lenscrete Ltd. (patent glazing), Robert

Now you can paint on NEW PLASTER

ALBASITE, the new Plaster Primer, may be applied to Patent Plaster as soon as the surface is reasonably hard, and painted over the next day without fear of flaking. ALBASITE dries flint hard yet at the same time has exceptional elasticity; it adheres closely to the smoothest surface yet dries with a slightly rough finish, an excellent key for subsequent coats of Undercoating, Gloss Paint or Flat Oil Paint, which may be applied without fear of chipping or discolouration. ALBASITE has great resistance to water and alkali salts, and can be scrubbed after a few days without affecting the film. Bare brickwork and Lime Plaster may also be treated with ALBASITE, which is supplied in two qualities—for brushing or spraying.

Write for further particulars.

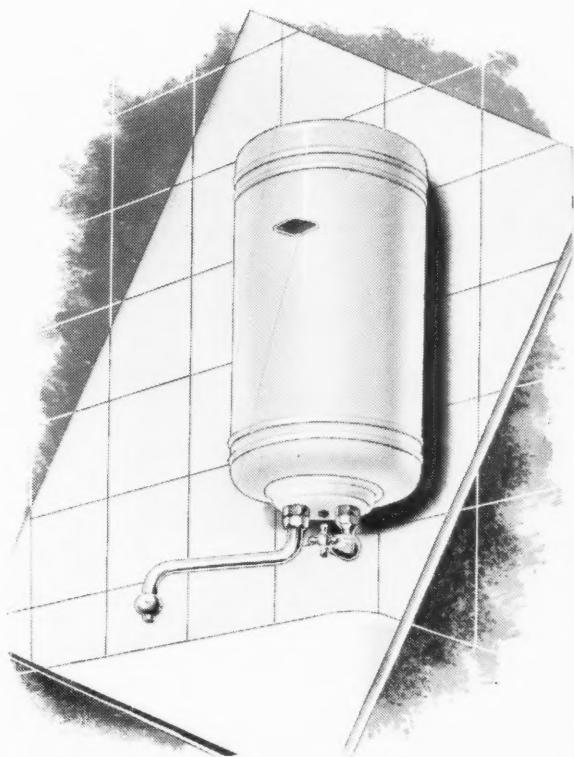
Albasite

the NEW PRODUCT made by

Nobles & Hoare Ltd

CORNWALL ROAD, STAMFORD STREET, LONDON, S.E.1

Telephone WATerloo 4694



"The safest water mixing valves are thermostatically controlled, suitable for working on unequal supply pressures."

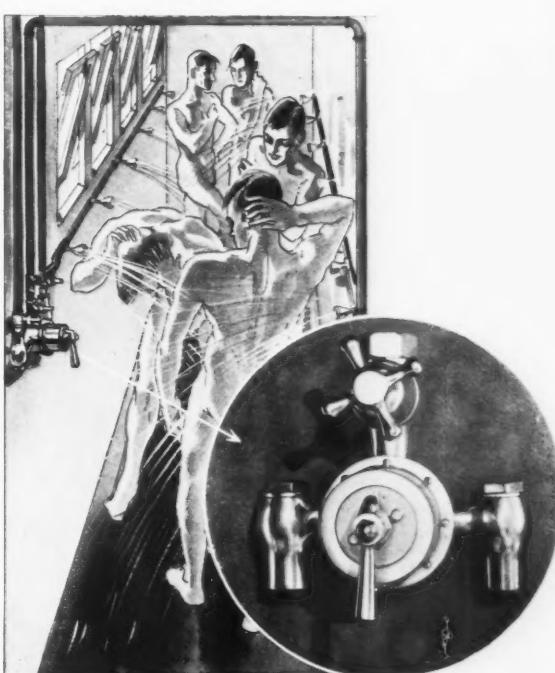
Board of Education circular (Physical Training series 14/1938).

Leonard-Thermostatic water mixing valves, which have been used in hundreds of schools already over the last two years, are now recommended as standard practice for all schools.

Wherever group washing takes place, as in schools, factories, hospitals, barracks, passenger ships, holiday camps and such places, there is no need for every user to make his own blend of hot and cold.

With Leonard-Thermostatic valves, hot water can be supplied at the temperature best suited for the job in hand, and those who provide it can determine the temperature at which it is to be used. Thereafter, the valve will keep it there, no matter what fluctuations occur in the supply system.

Leonard-Thermostatic valves have been specified by more than a hundred leading Architects. They have been adopted as standard equipment by thirty County Councils and two hundred Municipalities.



Along term policy

When people insure their lives or property over a long period of years, they talk of "taking out a long term policy".

So why shouldn't you, when you specify a hot water system that ensures efficient hot water for years and years, speak of "putting in a long term policy"—in water heating?

Certainly you would be justified in saying so when you were specifying a Sadia. Sadias were the first electric water heaters. They are still the foremost—silent, safe, simple, sure. More than a quarter of a million of them are in use to-day. And in many households pioneer Sadias, dating from the Company's first year, are still working merrily day and night, as promptly and dependably as they have worked for all of sixteen years.

*Information Sheets Nos. 608 & 720 available post free on request
AIDAS ELECTRIC LIMITED, SADIA WORKS
ROWDELL ROAD, NORTHOLT, MIDDLESEX*

Phone: Wavlow 1607

Scottish Agents: W. Brown & Co. (Eng.) Ltd., 89, Douglas Street, Glasgow, C. 2

SADIA

AUTOMATIC ELECTRIC
WATER HEATERS

Specify Leonard-Thermostatic
water mixing valves for washing equipment

Illustrated pamphlet with full particulars from the sole licensees and manufacturers—

WALKER, CROSWELLER
AND COMPANY LIMITED
WHADDON WORKS, CHELTENHAM, GLOS.

© 61-22

TRADE AND CRAFT

Heyworth & Co. (central heating, plumbing), Ideal Boilers & Radiators Ltd. (boilers), Golf Radiator Co. Ltd. (radiators), Electrical Illuminating Co. (electric wiring), Oswald Hollmann Ltd., Restlight Ltd. (electric light fixtures), Shanks & Co. Ltd. (sanitary fittings), Dryad Metal Works Ltd., Taylor Pearse & Co. Ltd. (door furniture), Crittall Manufacturing Co. Ltd. (casements), Silent Gliding Doors Ltd. (sliding doors), P. C. Henderson & Co. Ltd. (garage doors), Merchant Trading Co. Ltd. (flush doors), Robertson and Co. (joinery), Morton Sundour Fabrics Ltd., Edinburgh Weavers Ltd. (textiles), Sissons Bros. & Co. Ltd. ("Tungaline" paint used on cement work), Finmar Ltd. (cloakroom fittings), Reid & Co. (paint-work) "Solite" ("Solite" partition blocks).

Civic Centre at Tunbridge Wells.

Architects : Percy Thomas and Ernest Prestwich.

The general contractors were R. Corben & Son Ltd. who were also responsible for the paneling to assembly hall. Among the sub-contractors and craftsmen were the following :—J. H. Nicholson & Co. Ltd. (heating and ventilation), Troughton & Young Ltd. (electrical installation and stage electrical work), Trussed Concrete Steel Co. Ltd. (reinforced concrete stairs,

floors and roof, floors), Connies & Meaden Ltd. (constructional steelwork), John Stubbs (Marble & Quarzite) Ltd. (marble floor and wall linings), Korkoid Decorative Floors Ltd. (flooring), Hollis Bros. & Co. Ltd. (wood-block floors), Art Pavements & Decorations Ltd. (terrazzo wall linings and staircases), Gilbert Seale & Son Ltd. (fibrous plaster), Crittall Manufacturing Co. Ltd. (metal windows), Henry Hope & Sons Ltd. (lantern lights and haystack light), H. H. Martyn & Co. Ltd. (decorative metalwork, special windows and canopy), Shanks & Co. Ltd. (sanitary fittings), Merchant Adventurers of London Ltd. (electric fittings), Limmer & Trimidad Lake Asphalt Co. Ltd. (asphalt tanking and roofs), Shapland & Petter Ltd. (flush doors and wooden furniture), Hall & Dixon Ltd. (stage equipment, curtains and safety curtain), W. & A. Baker & Co. (1910) Ltd. (wrought iron balustrades), Strand Electric & Engineering Co. Ltd. (footlights), W. G. Harris & Co. (carpets and blinds), W. Lusty & Sons Ltd. (balcony chairs), Cox & Co. Ltd. (auditorium chairs and lounge chairs and tables), Carter & Co. Ltd. (tiling to pay-boxes and floors), Francis Morton Junior & Co. (spring floor), Sumerling & Co. Ltd. (kitchen equipment), British Plaster Board Co. Ltd. (acoustic plaster), Pilkington Bros. Ltd. (etched glass), James Gibbons Ltd. (locks and furniture and cell doors), Bath & Portland Stone Firms Ltd. (portland stone), R.I.W. Protective Products Co. Ltd. (waterproofing to stone-

work), Mander Bros. Ltd. (paint), Walpamur Co. Ltd. (acoustic paint), Electrical Installations Ltd. (electrical installation), G. T. Rackstraw Ltd. (panelling in court), Thermolux Glass Co. Ltd. (court room laylight), Roneo Ltd. (steel furniture), Bromsgrove Guild Ltd. (wrought iron balustrades), Haskins (rolling shutters), S. F. Bowser & Co. Ltd. (petrol pump), Gent & Co. Ltd. (electric clocks), S. Dixon & Son (fire appliances), J. B. Johnson Ltd. (plaster), Bull Motors (branch of E. R. and F. Turner Ltd.) (Bull super-silent motors).

Penthouse Flat at Highgate.

Architects : Tecton.

The general contractors were J. L. Kier & Co. Ltd. who were also responsible for reinforced concrete, plaster, joinery, etc. Among the sub-contractors and craftsmen were the following :—Permanite Ltd. (asphalt, roofing felt), Pilkington Bros. Ltd. (glass), Ramsdens Ltd. (floor tiles, stairtreads, bathroom and kitchen tiling), Armstrong Cork Co. Ltd. (cork floor), G. N. Haden & Sons Ltd. (panel heating, plumbing), Mortimer Gall & Co. Ltd. (electric wiring), Allom Bros. Ltd. (electric light fixtures), Shanks & Co. Ltd. (sanitary fittings), Williams & Williams Ltd. (casements), Carter & Co. Ltd. (outside tiling), Jaconello Ltd. (marble), D. Burkle & Sons Ltd. (furniture), Clarence Elliott Ltd. (shrubs and trees), J. and E. Hall Ltd. (lifts).



It pays a bank

to be used by its customers, though many of its services cost the customer nothing.

It is the Westminster Bank's policy to popularize its services by issuing simply worded accounts of various ways in which it is glad to be used.

These bright-covered little leaflets are conspicuous in any branch of the Bank, and may be taken freely.

They already comprise 'Thirty-nine Advantages of an Account', 'Points before Travelling', 'Securities', 'Travellers Cheques', 'Wills', 'Income Tax', 'Forward Exchange' and others.

**WESTMINSTER BANK
LIMITED**



(*The Architect and Building News* of June 2nd, 1939)

KINGSTON HOUSE

Kensington Road, S.W.7

(Described in "The Architectural Review" of June, 1939)*

A general view of the back seen across the gardens

Architect : MICHAEL ROSENAUER, F.R.I.B.A.

OTHER IMPORTANT CONTRACTS INCLUDE :

BANK OF ENGLAND, Rebuilding	SIR HERBERT BAKER, R.A., F.R.I.B.A. A. T. SCOTT, F.R.I.B.A. F. W. TROUP, F.R.I.B.A.
BRITISH MUSEUM, N.E. Quadrant of Iron Library, Reconstruction..	J. H. MARKHAM, F.R.I.B.A., H.M. OFFICE OF WORKS
OFFICE Block, Romney House, Westminster	MICHAEL ROSENAUER, F.R.I.B.A.
ROYAL CANCER HOSPITAL, Laboratory	MESSRS. HENRY TANNER, F.R.I.B.A.
WANDSWORTH BRIDGE, Reconstruction and Widening	T. PEIRSON FRANK, M.I.N.S.C.E., F.S.I., CHIEF ENGINEER, L.C.C. E. P. WHEELER, F.R.I.B.A., ARCHITECT TO THE L.C.C.
WESTMINSTER HOSPITAL and Nurses' Home & Medical School ..	ADAMS, HOLDEN & PEARSON, F.R.I.B.A.

HOLLOWAY BROTHERS (LONDON) BRIDGE WHARF, MILLBANK, S.W.1

Decorating & Furnishing Dept.— Joinery Works— Stone Masonry Works—
43 South Audley St., Grosvenor Sq., W.1 Magdalen Road, Earlsfield, S.W. Thessaly Rd., Battersea, S.W.



On the north bank of the Lake of Zurich is the agricultural section, the collection of Swiss villages and the light-hearted amusement section where the decorations are cheerfully surrealistic. The large Festival Hall can be seen in the centre foreground.

Trade News and Reviews

By BRIAN GRANT

The Swiss National Exhibition

THE Swiss National Exhibition, held this year in Zurich, has been sadly overshadowed by the Brobdignagian international Fair at New York; this is a pity, for there is a lot that we can learn from the competent and intelligent way in which the Swiss people have planned and organized their own national show.

The exhibition at Zurich has as its aim the portrayal of the life of the Swiss Nation whose people, speaking four different languages, co-operate in all fields of learning and industry to form a national unity. It is magnificently sited and is divided into two sections, one on either side of the lake of Zurich. At the head of these notes we see an aerial view of the north side which is devoted to pavilions of agricultural and rural occupations with some replicas of traditional work carefully grouped amongst the trees. The land formerly was parks and gardens and great care has been taken not to destroy any of the trees. On the south side of the lake are all those exhibits concerned with industrial, educational and other aspects of Swiss life.

The planning and lay-out was entrusted to a group of young architects working under the direction of Armin Meili, with Hans Hoffmann as chief architect. Their determination was that the exhibition should not merely be a fair with groups of competing exhibits, but rather a synthesis of the national life, and all the pavilions have been carefully related to form a continuous and balanced display.

One most interesting aspect of the exhibition is the exploration that has been made of the architectural uses of timber in enlightened contemporary hands. There is nothing here of the sham monumental; everything is thoroughly practical. Of outstanding interest, too, is the concrete exhibit designed as a parabolic reinforced concrete arch. The photograph at the foot of this page shows the arch in course of construction; on the next page we see the exhibit nearing completion; although the arch is over 50 ft. high, it is never more than $2\frac{1}{4}$ ins. thick.



The concrete exhibit in an early stage of construction.

THE INSTITUTION OF MECHANICAL ENGINEERS

STOREY'S GATE, S.W.

Library bookcasing and

Panelling by Hammers



RECENT

LIBRARY CONTRACTS INCLUDE

BRANCH LIBRARY, MILL HILL, BORO OF HENDON.
BOROUGH ENGINEER AND SURVEYOR.

BRANCH LIBRARY, GOLDCRIST GREEN.
BOROUGH ENGINEER AND SURVEYOR.

BRANCH LIBRARY, N. FINCHLEY.
BOROUGH ENGINEER AND SURVEYOR.

COUNTY LIBRARY, HAYES.
COUNTY ARCHITECT: W. T. CURTIS, ESQ., F.R.I.B.A.

BECKENHAM PUBLIC LIBRARY
ARCHITECTS: MESSRS. GOLD & ALDRIDGE.

LUTON MODERN SCHOOL.
Library and Assembly platform furniture.

LUTON HIGH SCHOOL FOR GIRLS.
Complete library furnishing. Beds. C. C.

SOUTH WEST TECHNICAL INSTITUTION.
Special lecture room desks and tables.

RYE GRAMMAR SCHOOL.
Complete library furnishing. East Sussex C. C.

HAYWARD'S HEATH SCHOOL.
Complete library furnishing. East Sussex C. C.

ALSO MANY CHURCHES OF MODERN
DESIGN EQUIPPED BY HAMMER'S.
WRITE FOR INTERESTING DESCRIPTIVE
BROCHURE.



INQUIRIES ALSO INVITED FOR EVERY TYPE
OF CHURCH FURNITURE, SCHOOL AND INSTITUTE
FITTINGS, OFFICE EQUIPMENT, RESTAURANT
SCHEMES, & LABORATORY FURNITURE, ETC.
FLUSH AND PANELLED FIXED & SLIDING SCREENS
FLUSH PANELLED DOORS IN ALL WOODS & VENEERS.

We place ourselves at the service
of every architect for the
preparation of designs and details
for all woodwork and furniture.

GEO. M.
HAMMER
& CO., LTD.

CROWN WORKS HERMITAGE ROAD
HARRINGAY
LONDON, N.4

Telephone:
Stamford Hill 6691-2

Aluminium

Switzerland's chief metal, aluminium, is exhibited in a pavilion of striking design. In the photograph that accompanies these notes we get a worm's-eye view of the sheet aluminium canopy which is constructed on a wooden frame and supported on aluminium columns. The internal walls of the pavilion are lined with corrugated asbestos sheets painted white, thus providing a suitable background for the aluminium castings and extrusions exhibited.

Recent statistics show that the consumption of aluminium and magnesium is at least 60 times greater today than it was in 1900. The world output of aluminium for 1938 is estimated to be well over 550,000 tons, of which total Great Britain and Canada produced 79,000 tons. Germany, with a total of 100,000 tons last year, has now surpassed U.S.A. in production and Russia is said to be increasing her output rate even more rapidly than Germany. According to recent computations of the mineral deposits of the earth's crust to a depth of ten miles, metallic elements comprise 25.22 per cent. Of this metal content aluminium is present to the extent of 31.9 per cent., iron 19.9 per cent., and the main constituents of bronze, i.e. copper and tin (with relatively minor, but important, amounts of lead and zinc) comprise together probably rather less than 2 per cent. This indicates that, of the structurally valuable metals, aluminium is by far the most abundant.

During the past few years architects in every country have shown the greatest interest in the development of aluminium uses. They like the metal for its appearance, and its mechanical properties and workability offer the widest choice of possibilities to the designer and fabricator. So far as this country is concerned it is fortunate that the aluminium-producing companies are genuinely interested in establishing the closest collaboration between themselves, the architect-designer and the fabricators and craftsmen. The British Aluminium Company and the Northern Aluminium Company have both issued many excellent publications which supply, in an admirably condensed form, the sort of information that must be available if progress and development are to be sound rather than "stuntish" and experimental.

The Building Centre in New Bond Street is to have a new shop front. This is good news. The shop front is to be



The concrete exhibit at the Zurich exhibition nearing completion. Although over 50 ft. high the shell of this reinforced concrete arch is never more than 2½ inches thick. Designer: Robert Maillart.

designed and executed in aluminium and the Northern Aluminium Company, in collaboration with the directors of the Building Centre, have organized a competition which is open to all architects and architectural students of British nationality. Prizes of £100 and £50 will be awarded for the two winning designs. The assessors appointed are Robert Atkinson, Maurice E. Webb, R. S. Lavers and F. R. Yerbury. Applications for details and conditions should be sent to The Building Centre—they should be sent immediately, as I understand that the closing date is not so very many weeks off.

G.V.D. lighting at Battersea Power Station

The photograph reproduced on the next page is a view of the main Control Room at Battersea Power Station. As originally designed the large laylights, extending over practically the whole of the ceiling, admitted daylight but A.R.P. requirements have now decreed that all daylight must be excluded from this source, and artificial light substituted. In planning the lighting G.V.D. Illuminators Ltd., were asked to reproduce as nearly as possible the effect of daylight. Illumination had to be even, glareless and practically shadowless; there must be no high lights on the dials and instrument panels. The photograph,

taken without any subsidiary lighting, certainly indicates that the new lighting of the laylights has been most successfully carried out. It will probably surprise you, it did me, to be told that although the eight laylights cover an area of 5,700 square feet only twenty-eight lighting points have been found necessary.



The canopy to the Aluminium Pavilion is made of sheet aluminium on a wooden frame and supported on aluminium columns. Architect: R. Winkler.

New York World's Fair



39.77.

The shape of things to come is illustrated by displays at successive World Exhibitions

A feature of the British Pavilion at the New York World's Fair is the Aluminium screen 42 ft. high by 13 ft. wide made up of from 14 inch wide sheets drawn to the shape of curve and anodised pastel silver by Messrs. Alumilite & Alzak. Superimposed is a section of the screen.

and it is significant that in those structural and decorative schemes, aluminium and aluminium alloys have figured increasingly.

THE
British Aluminium
CO. LTD.

HEAD OFFICE: ADELAIDE HOUSE, LONDON, E.C.4

Telephone: MANSion House 5561.

Telegrams: "Cryolite Bilgate, London."

A.R.8.39.

TRADE AND CRAFT

Publications received

"The A.B.C. Guide to Glass in Architecture, Building and Decoration" by G. S. Reynolds and G. P. Hughes. Here is a small and eminently practical volume that every architect will like to have, a simple dictionary of glass facts and formulae carefully compiled and suitably illustrated. The publishers are Stone & Cox, Ltd., of Africa House, Kingsway and the price is 5s. (5s. 6d. post free). In preparing this extremely useful handbook on glass the authors have enlisted the co-operation of the principal glass manufacturers and merchants and all the data and technical information given is both up to date and reliable.

•

"Ceramics in Art and Industry." This is the title given to the house journal issued by Doulton & Company, the second number of which has just been published. House journals as a rule are very wearisome affairs—from pillar-box to waste-paper basket is the route taken by the great majority of them. Those responsible for the production of this Doulton magazine may rest assured that no such untimely fate will reward their efforts. "Ceramics in Art and Industry" is an exceedingly well-produced and most interesting journal, and I am not surprised to learn that in view of the demand, they had for their first number, Messrs. Doulton have printed 6,500 copies of this second issue.



The lighting of this Control Room is from the eight large laylights extending practically over the whole of the ceiling. Although the laylight area totals over 5,700 square feet only twenty-eight lighting points are employed. Lighting engineers: G.V.D. Illuminators, Ltd.

G.E.C. Ironclad Switchgear.—The new edition of the G.E.C. Ironclad Switchgear Catalogue has just been published. As in previous years the catalogue comprises chiefly non-automatic ironclad switch and fuse gear, together with

JOHN LINE & SONS LTD BOURNEMOUTH · READING · MANCHESTER · NEWCASTLE-UPON-TYNE · EDINBURGH · DONCASTER · BIRMINGHAM

MAKE A NOTE OF THIS NAME

JOHN LINE & SONS LTD
WALLPAPERS AND PAINTS

For over sixty years the name
"LINE" has stood for the finest
in decorative materials

★ Our specialised knowledge is at your service

FOR WALLPAPERS & PAINTS

JOHN LINE & SONS LTD · LONDON AND BRANCHES

LONDON SHOWROOMS · 213-216 TOTTENHAM COURT ROAD · LONDON W.I.



New beauty and a New Standard of Hygiene



In design, finish and colour "Standard" Sanitary Appliances have no equal. But beauty is not their only recommendation, for "Standard" appliances have great strength and hygienic value because they are made from the guaranteed non-porous material with the non-crazing glaze—IDEAL VITREOUS CHINA.

Equally attractive and strong are the porcelain enamelled cast iron baths. Specify "Standard" Sanitary Appliances and make *sure* of permanent hygiene and lasting beauty. Write for the catalogue and see the large variety of designs and pleasing colours in which these sanitary appliances are now available.

IDEAL BOILERS & RADIATORS LTD., Showrooms: LONDON, Gt. Marlborough St., W.1
BIRMINGHAM, 35, Paradise Street, and HULL

TRADE AND CRAFT

certain circuit breakers, contactors, earth leakage trips, thermostats, transformers and other control and protective equipment required for modern electrical installations. An important alteration has been made, however, in that the ironclad gear is now finished to match Silverlac conduit as standard instead of black enamel. This change involves no extra cost. There are, too, several additions. Among the most interesting are the all-insulated switch fuses and the combined switch fuse and transformer units for low-voltage safety lighting. The catalogue is carefully indexed and well illustrated.

Good Bricks and Tiles.—G. Tucker & Son, Ltd., of Loughborough, Leicestershire have produced this small book in order to provide architects with actual colour reproductions of many of the facing bricks and roofing tiles made at their works. In all there are eighteen colour illustrations, all are close-up details of brickwork and tilework so that one gets a good reproduction of the texture as well as the colours and colour combinations.

Automatic Central Heating with Coal.—Hopes catalogue No. 202 illustrates and

describes their automatic stokers for domestic installations. Heavy industrial stokers will be dealt with in a separate catalogue, at present in preparation, which will be available towards the end of the summer.

From Henry Hope & Sons, also, I receive a copy of a pleasantly illustrated brochure with the title "When You Build." Again this confines its attention to domestic architecture and illustrates a selection of architect-designed houses and blocks of flats. I would like to believe that this brochure will get into the hands of many prospective house purchasers. Primary object of the book, however, is to familiarize architects with some of the many types of Hope metal casements produced for domestic work. The building cost of each of the houses illustrated is given and also the contract price for the supply and fixing of the metal window casements.

Wood Rolling Shutters.—Haskins standard range of wood shutters is described and illustrated in their most recent catalogue—they are of such variety in size and type that they would appear to meet most eventualities, from the smallest

tobacco kiosk to heavy pattern shutters for engine sheds and warehouses. The catalogue is well illustrated with photographs of completed contracts and diagrammatic drawings giving details of mechanical operation and fastening and locking gear. Applications for copies should be addressed to Haskins Ltd., Walthamstow, London, E.17.

THE POLYTECHNIC, REGENT STREET, W.I.

SCHOOL OF ARCHITECTURE

President of the School: SIR BANISTER FLETCHER, P.P.R.I.B.A., M.Arch., F.S.A., F.R.S.L., F.S.I.

Head of the School: JOSEPH ADDISON, M.C., F.R.I.B.A., M.I.Struct.E., A.M.T.P.I.

COMPLETE COURSES OF INSTRUCTION IN ARCHITECTURE, TOWN PLANNING AND INTERIOR DESIGN.

The Day School of Architecture is fully recognised by the Royal Institute of British Architects. The Final Diploma Examination of the School is a qualification for registration under the Architects' (Registration) Act. The special day course in Town Planning is recognized by the Town Planning Institute and the Town Planning Joint Examinations Board. Other full-time day courses are available in preparation for the Examinations of the Chartered Surveyors' Institution, the Institute of Builders and the Ordinary and Higher National Diplomas in Building Technology. There is also a full-time course in Interior Design.

Session commences 19th September, 1939.

For prospectus apply to the Director of Education.



THE PLANET MIRROR IN FIRST CLASS DINING SALOON

R.M.S. "MAURETANIA"

Decorated Glass Mirrors, Windows Lighting Features

throughout the Ship

were designed and supplied

by

THE LONDON SAND BLAST
DECORATIVE GLASS WORKS LTD.
SEAGER PLACE, E.3

Showrooms: 4, FITZROY SQUARE, W.I.

Architects: A. McINNES GARDNER AND PARTNERS
Contractors: MESSRS. WARING & GILLOW

CREATION WITH CRAFTSMANSHIP



International Alloys Ltd.
NEW BOARD-ROOM

Architect: G. J. W. HASWELL, ESQ., A.R.I.B.A.

Pros and Cons

Whether it be property, progress, or promotion under discussion, no ultimate good can result from conference if confidence born of knowledge and experience does not underlie the convictions expressed.

Consultation—conviction—confidence: we pride ourselves on that formula constantly associated with C. P. Service.

Demonstrative of versatility and skill in the application of wood and metal, the rhythmic lines of this board-room contribute to the harmony and efficiency of conference surroundings. Courtney Pope were responsible for the Australian walnut wall-panelling with Macassar ebony cornice and architrave, as well as for the board-room table, chairs, and metal grilles.



COURTNEY, POPE
LTD.

AMHURST PARK WORKS, TOTTENHAM, N.15

TEL.: STAMFORD HILL 4266

THE BRITISH PAVILION NEW YORK WORLD'S FAIR

ARCHITECTS:

STANLEY HALL & EASTON and
ROBERTSON

CHIEF DISPLAY DESIGNERS:

MISHA BLACK, MILNER GRAY and the REIMANN STUDIOS

Among the sub-contractors were the following:

General Electric Co. Ltd., Best & Lloyd Ltd., A. C. E. Utilities Ltd., Davis Bros., F. H. Pride, O. D. Binger Ltd., Strand Electric Co. Ltd., Leon Goodman Displays Ltd., Franco Signs Ltd. (electric light fittings), Williams & Williams Ltd. (metal windows), Furdecor Ltd. (soft furnishings), D. Burkle & Sons Ltd. (joinery), Frederick Tibbenham Ltd. (interior display in Burma teak and aluminium), Beck & Pollitzer Ltd. (awnings), Keystone Paint and Varnish Co. Ltd. (paint), British Thomson-Houston Co. Ltd. (cinema apparatus), E. J. and A. T. Bradford Ltd. (models for crowns), J. Starkie Gardner Ltd. (metal doors),

N. F. Ramsay & Co. Ltd. (door furniture), Morton Sundour Fabrics Ltd. (wall coverings), Runnymede Rubber Co. Ltd. (rubber floorings), Cement Marketing Co. Ltd. (Ivory White Culamix with scraped finish for exterior), F. De Jong & Co. Ltd. (plaster models), Pilkington Bros. Ltd. (glass and decorative glass-work), Frederick Sage & Co. Ltd. (showcases, etc.), Court Studios Ltd. (Dioramas), Autotype Co. Ltd. (photo murals), Alumilite Ltd. (special aluminium processing), Mond Nickel Co. Ltd. (nickel silver for doors and special metal work), London Sand Blast Decorative Glass Works Ltd. (decorative glass-work), O. D. Binger Ltd. (electrical equipment).

Leonard-Thermostatic water mixing valves hold the temperature steady



Courtesy of Woolwich Borough Council

An example of automatic control of water temperature for dental sprays. Hot water from the heaters passes through a Leonard Valve to the basins at blood heat or thereabout. The control of the temperature is quite automatic and is independent of variation in the supply pressures.

Illustrated pamphlet with full particulars from the manufacturers:—

The Valve controls the temperature within a degree or two of the prescribed point with absolute reliability. Leonard-Thermostatic Valves have been specified by more than a hundred leading Architects. They have been adopted as standard equipment by thirty County Councils and two hundred Municipalities.

WALKER, CROSWELLER & CO. LIMITED
WHADDON WORKS . CHELTENHAM . GLOS.

©61-25a



Lasting beauty plus permanent hygiene



When you install "Standard" Sanitary Appliances you not only create a bathroom of outstanding beauty but also one of lasting hygiene, because "Standard" Appliances have the exclusive advantage of being made from "Ideal" Vitreous China, the guaranteed non-porous sanitary material, with the non-crazing glaze. The discoloured, evil smelling condition too often apparent in other sanitary materials, is the result of dirt and germ laden moisture being absorbed through a crazed surface into a porous body. This cannot possibly happen to non-absorbent "Ideal" Vitreous China. To ensure complete, and lasting hygiene in your bathrooms, always specify "Standard" Sanitary Appliances made with "Ideal" Vitreous China. Write for the "Standard" catalogue of vitreous china appliances and porcelain enamelled cast iron baths.

IDEAL BOILERS & RADIATORS LTD. Showrooms: LONDON, Gt. Marlborough St., W.1
BIRMINGHAM, 35, Paradise Street, and HULL.

Trade News and Reviews

By BRIAN GRANT

Shanghai and Tientsin

CONCERNING the Eastern front two news items of architectural import attracted my attention during the early days of August. The first announced the completion and ceremonial opening of the new G.E.C. offices and showrooms in Shanghai. The new "Magnet House" in Szechuen Road, Shanghai, is a five-storey building housing the public showrooms, offices and stockrooms of The General Electric Company of China, Ltd., and a photo-

graph showing the main elevation is reproduced at the head of these notes.

In recent months tidings from China have been disturbing and grim, photographs in the Press have dealt with demolition rather than construction and it is quite a change to read of something that has been built up not blown up.

May the directors and staff of this new and important G.E.C. office witness a speedy return to peaceful ways of living.

The new G.E.C. headquarters at Shanghai.



perhaps it is just a little late in arrival since the picture rail seems to be fast disappearing from architect-designed houses. The vertical rod of the fitting is 4 feet in length and the lamp arm can be adjusted to any height within the 4 feet, it can also be inverted for use with a drop shade. Fitted with a suitable length of flex it can be plugged into any convenient socket and hung at any point on the picture rail where supplementary lighting might be required.

The rather formal type of fitting illustrated does not appear to be most suitable for its purpose but the basic idea is good and no doubt later designs produced by the G.E.C. will give greater flexibility.

Zinc Weatherstripping

I am unable to find the word "Weather-strip" in either of my two building encyclopaedias. There is a reference to "Weather-bar" and "Water-bar," both of which are described as "patent weather - excluding devices for easements that open inwards—a strip of oak, galvanized iron or copper 1 in. by $\frac{1}{4}$ in., fitted into corresponding grooves in window-cill and frame-cill to prevent water from penetrating." It is not suggested that the "weather-bar" is designed also to exclude draught and to eliminate heat loss.



Picture rail lamp brackets—a new type of portable lighting bracket introduced by the G.E.C.

TRADE AND CRAFT

The Architect's Vision in Reality



Extensions to "Clubland," Camberwell Road, S.E.
Mr. Arthur Llewellyn Smith, A.R.I.B.A., Architect.

REINFORCED CONCRETE & CAST STONE

by

STUART'S
GRANOLITHIC CO. LTD.

ESTABLISHED 1840

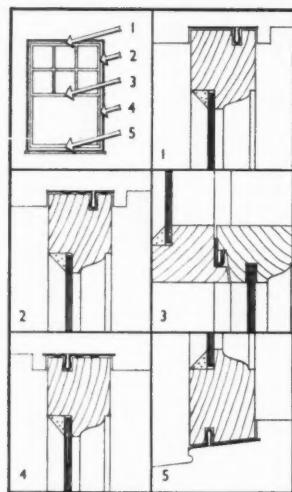


★ LONDON:
101 Baker Street, W.I.
Telephone : WELbeck 3775

★ EDINBURGH:
46 Duff Street.
Telephone : Edinburgh 61506

★ MANCHESTER:
Ayres Road, Old Trafford.
Telephone : Trafford Park 1725

★ BIRMINGHAM:
Northcote Rd., Stechford.
Telephone : Stechford 2366



According to figures given in the Building Research Station's book heat loss through leakages may be anything up to 40 per cent. of the total loss and the American Institute of Heating and Ventilating Engineers declares that approximately 69 cub. ft. of air per hour escapes through every foot of crack in a badly-fitting window in a breeze as low as 10 miles an hour.

By eliminating such heat losses it is estimated that there would be an annual saving of £10 on the fuel bill of a ten-roomed house fitted with central heating.

It seems likely also that efficiently "weatherstripped" windows would help considerably to reduce sound infiltration and to prevent window rattle.

There certainly appears, therefore, to be a good case for weatherstripping; indeed, when you consider the amount of money that is spent in providing insulation to walls and ceilings it is strange that more attention is not paid to the treatment of windows and doors.

All the essential facts about weatherstripping are now available in a small handbook issued by the Zinc Development Association who have standardized a series of zinc sections in order to facilitate the more extensive use of weatherstripping in this country. There are in all some eight different designs and all are illustrated by full-sized sections in the handbook. The sections at the head of this page show a typical application to a sash window and cover most of the sections except for a pair of slightly modified hooks used at the foot of casement windows and a comparatively heavy threshold strip for doors. Application of these zinc weatherstrips is very simple and should not prove very costly. The price of the strip itself works out at 6 shillings per hundred feet and present suppliers are Frederick Braby & Co., Ltd., Euston Road, N.W.1; G. A. Harvey & Co., Ltd., Woolwich Road, S.E.7 and Enfield Zinc Products, Park View Road, N.17.

Copies of the weatherstrip handbook may be obtained from the Zinc Development Association, Great Westminster House, Horseferry Road, London, S.W.1.

The "Hotpoint" washing-up machine

The electric dish-washer is almost the last word in kitchen refinement—fortunate is the housewife or housekeeper who has one installed in her kitchen. The smallest and cheapest domestic model at present made is shown in the sketch on page lviii—this is known as Model D.15 and its cost is £60, excluding installation cost. According to the manufacturers it is capable of washing up in one hour all the crockery, glassware, cutlery, etc., used for 100 meals and it seems, therefore, that its capacity is quite a lot in excess of the requirements of the average household.

This is not really a criticism of the washer for it is obviously an advantage to have such capacity available for possible emergencies, but one wonders if by cutting down the capacity it might not be possible to effect a very helpful reduction in manufacturing cost. This is the sort of drudgery saving machine that one would like to see installed in the most modest of households.

In operation the washer is extremely simple. The trays slide through from right to left. The lever, which can be seen projecting from the right side towards the top of the washing cabinet, is set to the "washing" position and retained at that position for a matter of some 30 seconds, the lever is then moved upward to the "rinsing" position and held there for five or six seconds.

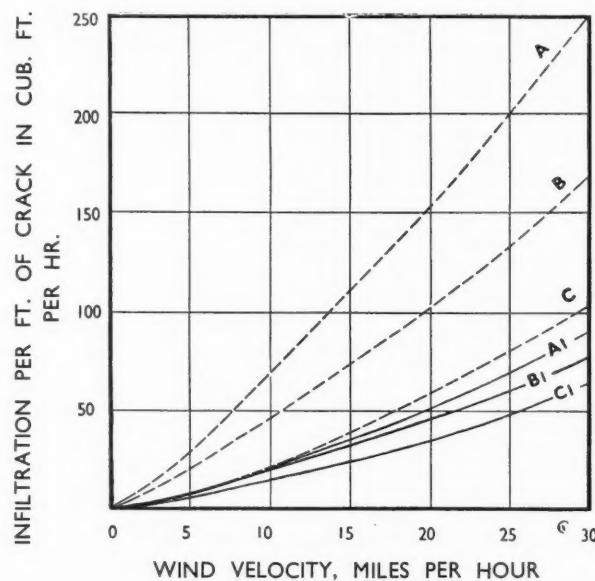
The tray of crockery is now washed, rinsed and in a matter of seconds, owing to the high temperature of the rinsing water, dry. The drawer beneath the washing up cabinet is a scrap tray which collects all solids. The two taps immediately below the scrap tray govern the hot water supply and the lever below the taps opens the waste cock and empties the hot water tank when the washing up is completed.

The Hotpoint brochure contains all particulars of this domestic model and of the larger models made for service in restaurants, hospitals, institutions, etc. (The Hotpoint Electric Appliance Co., Ltd., 24 Newman St., W.1.)

Black out

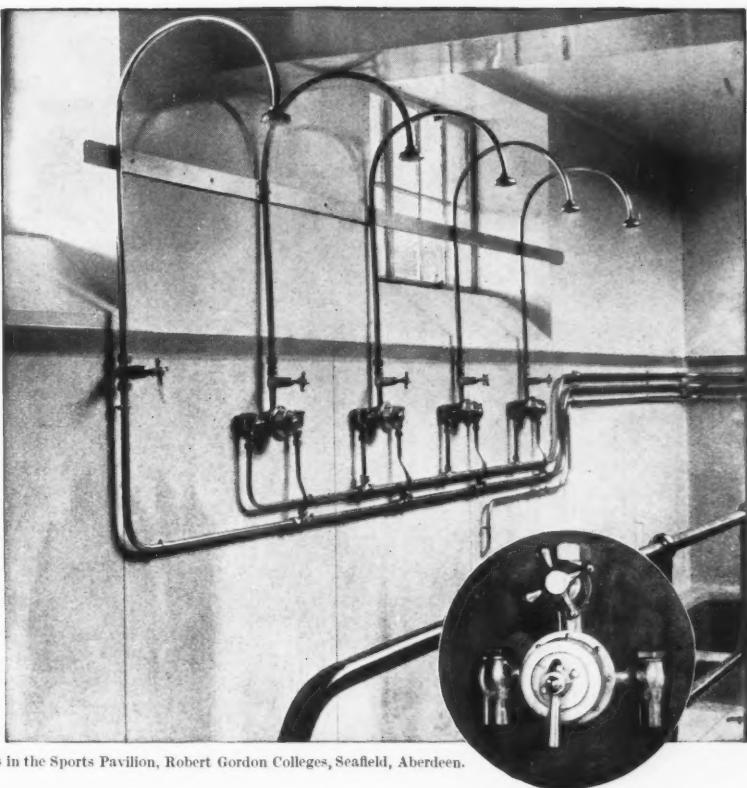
I have to confess that I slept right through the "black out" on August 10th and did not myself witness the efficiency or otherwise of the various light obscuring methods adopted. I like the story, told in a Sunday paper, of the light that burned ever so brightly all night long in a window at the War Office.

As an alternative to black blinds Metropolitan Vickers have evolved a scheme that should receive a welcome. The idea is based on special filters for all lamps and special light blue lacquer on all windows, the resultant "complementary colour" system permitting no artificial internal light to pass outwards through the window. During the daytime sufficient daylight is admitted through the lacquered windows for normal working purposes. Sodium lamps are used with a detachable tinted vacuum jacket. The reduction of light emitted is approximately 40 per cent., but as the output



Average wood sash window, $\frac{3}{8}$ in. crack. A1 The same weatherstripped. B Average metal sash window. B1 The same weatherstripped. C Well-fitted sash window, $\frac{1}{8}$ in. crack. C1 The same weatherstripped.

As steady as an Air Raid Warden



Leonard Valves on Showers in the Sports Pavilion, Robert Gordon Colleges, Seafield, Aberdeen.

It is not only in elegant places like University Sports Pavilions that Leonard Thermostatic Valves are used, but in holiday camps, National camps, militia camps, etc., and wherever baths are needed at low cost.

The shower spray is a wonderful bath but has never



come into its own because it would not stay put. Hot and cold, hot and cold: everything by turns but nothing long. Without a Thermostat a shower spray is not so much a toilet fixture as a pressure indicator letting the bather know on his bare

skin how pressures are rising or falling in the supply lines. A Leonard Thermostatic Valve will deliver water only at the temperature for which it has been set. It takes the kitten right out of the shower and makes it as responsible as an A.R.P. warden. It takes the waste out of it too, and the risk of scalding.

Of course showers are not the only thing. Where you have a decent head of water you can send the hot water from the boiler round the fixtures at 200° Fah. or anything short of steam raising.

At the point of use you can reduce it to 120° Fah. or what you will by means of a Leonard Thermostatic Valve. Think how that increases the capacity of your boiler; how it reduces costs of pipe line, equipment, insulation. Let no man say a word against the way the holiday camps, militia camps, etc., are being equipped. Starting with Prestatyn de luxe, a large proportion of them are to be Leonard equipped. Leonard Thermostatic Valves have been specified by more than a hundred leading Architects. They have been adopted as standard equipment by thirty County Councils and two hundred Municipalities.



Specify **Leonard-Thermostatic** water mixing valves for washing appliances

Send for illustrated pamphlet from manufacturers:—

WALKER, CROSWELLER & CO. LTD.

Whaddon Works, CHELTENHAM, GLOS.

LONDON OFFICE: 6 GORDON SQUARE, W.C.I. PHONE: MUS. 3107

©61.37

TRADE AND CRAFT

from sodium lamps is considerably greater than from gas filled lamps the lighting cost will not be increased to any great extent.

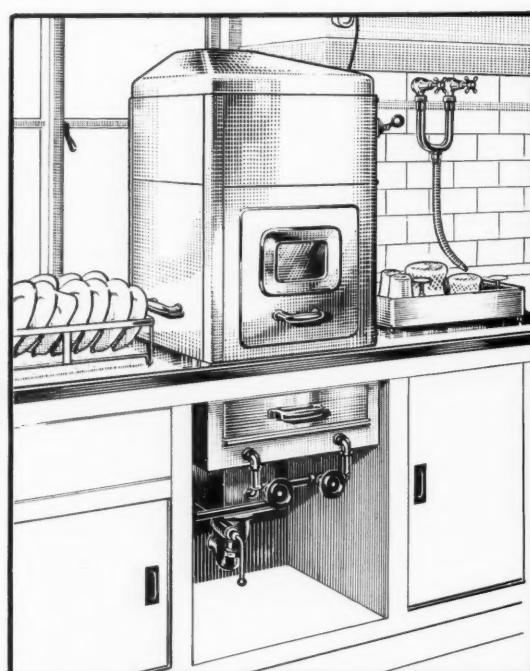
Should you be intending to adopt this convenient form of "black-out" precaution it should be noted that the lacquer and filters are arranged to work *only* with the light from sodium lamps and that there should be no other light sources, nor should any processes such as welding be carried on during precautionary periods.

All details and advice can be got from Metropolitan Vickers Electrical Co., Ltd., 1 Kingsway, London, W.C.2.

Camouflage at Leicester

We have heard amazingly little about camouflage, and though I have recently covered a good deal of ground in the southern and midland counties, I have seen little evidence of camouflage activity. Now that the Stationery Office have issued A.R.P. handbook No. 11 entitled *Camouflage of Large Installations* we may hear and see rather more about it, and those architects who have also a knowledge of flying, photography and scenic design may be called in to render their services.

In an earlier page in this number of THE ARCHITECTURAL REVIEW there is a photograph of the cooling towers at the central generating station of the Leicester City Electricity Service—here the camouflage design and the tone and colour values have been prepared so



The domestic model of the "Hotpoint" washing-up machine—a labour saver indeed.

that they match the trees and fields which surround the station. Oil bound water paint manufactured by Robert Kearsley & Company of Ripon was used and the camouflage artist was Mr. Ernest Townsend of Derby.

Lancaster Washable Wall-covering

James Williamson & Son of Lancaster have just issued a useful handbook and sample brochure describing their "Lion Brand" washable wall coverings.

Lancaster cloth is a muslin base impregnated with a linseed oil compound and the finish given may be matt or glossy according to choice. The method of application is almost identical with that of wall paper except that the paste is applied to the wall and not to the cloth; I notice, also, that the manufacturers recommend the use of a special adhesive paste, though they state that any good brand of paste may be used.

The range of colours and patterns available is extensive and a selection of samples is included in the brochure, copies of which may be obtained from the company's head office at Lancaster or from any of their branch offices.

Heat Economy

The Coal Utilisation Council have issued a small technical handbook on the subject of heat economy in hospitals and institutions.

WALLPAPERS & PAINTS

JOHN LINE & SONS LTD

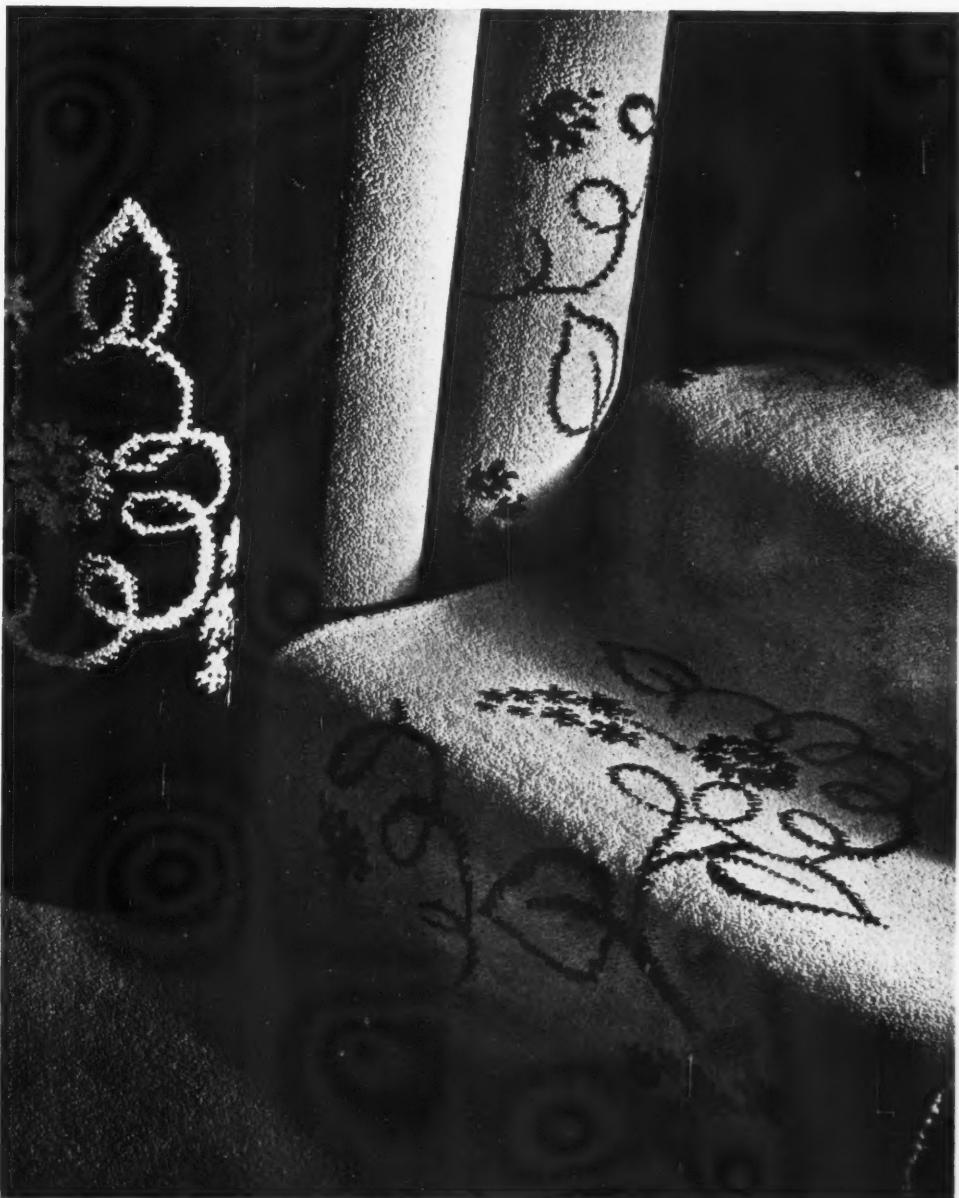
Makers of the "Studies in Harmony" Wallpapers & Paints
213-216, TOTTENHAM COURT ROAD, LONDON, W.I.

Telephone: MUSEUM 3300 (26 lines)

Special attention given
to Architects' enquiries

Hand-printed Wallpapers to Architects' own Colourings





16101. "Floriform"—a new design in Mahrud piece goods which is made in several attractive colourings including Celadon green and off-white, ivory and dark brown, dark brown and ivory, peach and off-white and Turquoise blue and wine.

Carpets of Distinction

some new designs by

JOHN CROSSLEY & SONS

LTD.
DEAN CLOUGH MILLS, HALIFAX, YORKSHIRE

London Showrooms and Studios:

20/22, KING EDWARD STREET, NEWGATE STREET, E.C.

Phone: NATional 6105

obtainable from Furnishers, Decorators, &c.



TRADE AND CRAFT

The different chapters deal with—fuel and fuel costs; typical solid fuel fired installations; subsidiary equipment; modernizing existing installations; and the conservation of heat. The first chapter contains a tabled analysis and comparison of fuel costs with various fuels and a further table gives the average annual consumption of fuel per head in asylums, hospitals and sanatoria.

Application for copies of the handbook should be addressed to the Coal Utilisation Council at Grosvenor Gardens House, London, S.W.1, or to any of the Council's branch offices.

A.R.P.—emergency repair system for water mains

The July-August number of the *Glenfield Gazette* contains some further notes on the sort of emergency repair work that would almost certainly have to be put into operation should war eventuate. The system of repair described has been designed by Glenfield & Kennedy, engineers and was demonstrated during May before representatives of the Ministry of Health, the Building Research Station and a number of water engineers.

I imagine there will be many architects who will like to have information of this sort available in their offices and would suggest that they apply to Messrs. Glenfield & Kennedy, Kilmarnock, Scotland, for descriptive details and illustrations.

The Buildings Illustrated

House at Esher, Surrey.

Architects: Patrick Gwynne and Wells Coates, F.R.I.B.A.

The general contractors and contractors for the reinforced concrete work were F. Bradford & Co. Ltd. Among the sub-contractors and craftsmen were the following:—Prestige & Co. Ltd. (general building work), Leslie Bilsby Ltd. (interior decoration, joinery, furniture and flush doors), Francois Cementation Co. Ltd. (R.C. piles), Franks Harris Bros. (excavation and main drives, etc.), Thomas Pascall & Sons Ltd. (facing bricks), Ruberoid Co. Ltd. (partitions, foamed slag blocks), Honeywill & Stein Ltd. (Heraklith partitions), James Clark & Son Ltd. (glass, including Thermolux), Pilkington Bros. Ltd. (glass bricks and dome lights), Hollis Bros. & Co. Ltd. (wood-block flooring), George Stephenson & Co. Ltd. (patent flooring—cork tiles), Matthew Hall & Co. Ltd. (central heating and plumbing), Urquharts (1926) Ltd. (oil firing), Moffat Ltd. (Moffat cookers), Hotpoint Electric Appliance Co. Ltd. (electric dish washer), Bratt Colbran Ltd. (fire interior in LR), T. Clarke & Co. Ltd. (electrical work), Troughton & Young

Ltd., Best & Lloyd Ltd., H.M.V. Household Appliances (electric fittings), Maple & Co. Ltd. (Maple striplight), E. K. Cole Ltd. (Thermovent heaters), British Knappen Ltd., Greenwood's Ventilating Co. Ltd. (ventilation), Fairways Ltd., John Bolding & Sons Ltd. (sanitary fittings), Oscar Kanter Ltd., Taylor Pearse & Co. Ltd., James Gibbons Ltd. (door furniture), J. D. Beardmore & Co. Ltd. (door furniture, metalwork), Tuke & Bell Ltd. (sewage disposal), Williams & Williams Ltd. (metal windows), D. Burkle & Son Ltd. (wood windows, joinery), Rota Products Ltd. (window gear to living-room), Joseph Avery & Co. Ltd. (sunblinds), Fairways Ltd. (Hydrokeen plaster), Plastering Ltd. (plaster work), Veneercraft Ltd. (doors), John Stubbs & Sons Ltd. (Levanto marble fireplace surround), Ramsden's Ltd. (terrazzo), Richards Tiles Ltd., Hall & Co. Ltd. (tiling), Edinburgh Weavers Ltd., Donald Bros. Ltd., Allan Walton Ltd., Marion Dorn, Ltd., Gordon Russell Ltd. (textiles), A. Sanderson & Sons Ltd. (Japanese grass cloth), Charles Humish Ltd., Thonet Bros. Ltd., Isokon Furniture Co. (furniture), Smith's English Clocks Ltd. (clocks), A. Johnson & Co. Ltd. (stainless steel sink), E.M.G. Handmade Gramophones Ltd. (radio), Stie B. Ltd. (external paintwork), E. Hill Aldam Ltd. (sliding door tracks), Armstrong Cork Co. Ltd. (cork insulation), Newalls Insulation Co. Ltd. (Paxtiles, insulation), J. C. Birch Ltd. ("Sylenz" floor clips).

Yet another example of the possibilities of RECONSTRUCTED STONE

The possibilities of Reconstructed Stone by "ELLIS OF LEICESTER" are practically inexhaustible, and the examples illustrated of the carved models representing a rabbit, a squirrel and a mouse, were commissioned for erection at an infants' school in Norwich, to the design of the Architect, Leonard G. Hannaford, F.R.I.B.A., City Architect, City Hall, Norwich, and were carved in Reconstructed Clipsham Stone by our own skilled craftsmen at our 60-acre production plant Barrow.

Perhaps we can be of help to you in your next job . . . there are a wide range of samples that provide the Architect and Builder with a comprehensive selection to cater for every possible demand.



JOHN ELLIS & SONS Ltd., LEICESTER

**Head Office: WELFORD HOUSE, WELFORD PLACE,
LEICESTER.** Phone: Leicester 5682 (5 lines).

**London Office: CAXTON HOUSE, TOTHILL STREET,
S.W.1.** Phone: Whitehall 8911 (2 lines).

We asked for **criticism...**



...and this is what he said-

"I require a pencil that will give good all-round service. The lead must be smooth and strong, capable of maintaining a good point — naturally I count on regular grading. Modern practice demands reproduction prints from original drawings, so that evenness and density of line are highly desirable. It is interesting to hear that you achieve these results by means of a special *colloidal* process in lead manufacture. That, no doubt, is why I find Venus Pencils meet all my requirements so satisfactorily."



VENUS PENCILS

VENUS PENCIL CO. LTD., LOWER CLAPTON ROAD, E.5

If you have any difficulty in being supplied, write direct to this address
for sample, stating which degree you prefer.

SEVENTEEN DIFFERENT SHADES OF BLACK TO CHOOSE FROM



TRADE AND CRAFT

Flats in Bayswater.

Architects : Howard Leicester and Partners, F.A.R.I.B.A.

The general contractors were Demolition & Construction Co. Ltd. Among the sub-contractors and craftsmen were the following :—Highways Construction Co. Ltd. (asphalt), W. T. Lamb & Sons (bricks), Atlas Stone Co. Ltd. (artificial stone), Horseley Bridge & Thomas Pigott Ltd. (structural steel), Diespeker & Co. (fireproof construction), Ramsdens (London) Ltd., Camden Tile & Mosaic Co. Ltd. (tiles), J. H. Sankey & Son, Ltd. (partitions), Aygee Ltd. (glass), Hills Patent Glazing Co. Ltd. (patent glazing), Arthur Scull & Son, Ltd. (central heating, ventilation), W. N. Froy & Sons Ltd. (grates), Gas, Light & Coke Co. Ltd. (gas fixtures, gasfitting), Colston Electrical Co. Ltd. (electric wiring, electric light fixtures, bells, electric heating), John Bolding & Sons Ltd. (sanitary fittings), Craigpark Electric Cable Co. (cables), Baldwins (Birmingham) Ltd. (door furniture), Williams & Williams Ltd. (casements), F. A. Norris & Co. Ltd. (folding gates, iron staircases), W. A. Telling & Sons (plaster, decorative plaster), Garton & Thorne Ltd. (metalwork), Palorit Paints Ltd. (artificial stone paint), John Stubbs (Marble & Quarzite) Ltd. (marble), Pyrotenax Ltd. (lift wiring cable installation), Anti-Static Ltd. (radio), Allensor Ltd. (special fitted cupboards), Marryatt

& Scott Ltd. (lifts), Tett Bros. Ltd. (water softening plant), Holroyd (Glassware and Lighting) Ltd. (lighting fittings), Clark, Hunt & Co. Ltd. (tubular railings), automatic Sprinklers Ltd. (sprinklers), Hewitt Engineering Co. (boilers), P. H. Barker & Son Ltd. (joinery), Fromow of Chiswick (shrubs and trees), Green Bros. (kitchen fittings), Bull Super Silent Motors by Bull Motors (Branch of E. R. & F. Turner Ltd.).

Sons Ltd. (sanitary fittings), Wing & Webb Ltd. (door furniture), Crittall Manufacturing Co. Ltd. (casements), C. A. & A. W. Haward (iron staircases), Heal & Son Ltd. (altar curtain, seat squabs and cushions), H. H. Martyn & Co. Ltd. (altar, pews, Book of Memory table), Eric Munday Ltd. (lettering on all doors), Thomas Ash & Co. Ltd. (flower chute in flower rooms), Omar Ramsden (cross and candlesticks).

Chapel of Memory at Golders Green.

Architects: Mitchell and Bridgwater.

Assistants: E. G. Membery and L. W. Aked.

Quantity Surveyor: R. W. Ord.

The general contractors were Pitchers Ltd. Among the sub-contractors and craftsmen were the following :—Lawford Asphalte Co. Ltd. (asphalt), F. Bradford & Co. Ltd. (reinforced concrete floors and staircase), Finnis & Ruault (bricks, tiles), Pilkington Bros. Ltd. (glass), J. Whitehead & Sons Ltd. (marble flooring), Cork Insulation Co. Ltd. (cork floor), Richard Crittall & Co. Ltd. (low temperature panel warming), A. H. Cornwall Ltd. (electric wiring), Troughton & Young Ltd. (electric light fixtures), John Bolding &

Kindergarten School,
nr. Northwich, Cheshire.

Architects: J. L. Martin and Sadie Speight, A.A.R.I.B.A.

The general contractors were E. B. Jones & Rawlinson Ltd. Among the sub-contractors and craftsmen were the following :—Turners Asbestos Cement Co. (wall finishes, internal and external), D. Anderson & Son Ltd. (special roofing), Terradura Flooring Co. Ltd. (Terradura flooring), A. J. Young Ltd. (central heating and plumbing), Ideal Boilers & Radiators Ltd. (ideal boilers), Oswald Hollmann (electric light fixtures), Dryad Metal Works (door furniture), Crittall Manufacturing Co. Ltd. (metal casements), P. C. Henderson Ltd. (sliding tracks).

Now you can paint on NEW PLASTER

ALBASITE, the new Plaster Primer, may be applied to Patent Plaster as soon as the surface is reasonably hard, and painted over the next day without fear of flaking. ALBASITE dries flint hard yet at the same time has exceptional elasticity; it adheres closely to the smoothest surface yet dries with a slightly rough finish, an excellent key for subsequent coats of Undercoating, Gloss Paint or Flat Oil Paint, which may be applied without fear of chipping or discolouration. ALBASITE has great resistance to water and alkali salts, and can be scrubbed after a few days without affecting the film. Bare brickwork and Lime Plaster may also be treated with ALBASITE, which is supplied in two qualities—for brushing or spraying.

Write for further particulars.

Albasite

the NEW PRODUCT made by

Nobles & Hoare Ltd

CORNWALL ROAD, STAMFORD STREET, LONDON, S.E.1

Telephone WATerloo 4694



J

In collaboration with the *Architects' Journal*, we have produced a number of information sheets covering the general architectural application of aluminium.

This essential information, which has been planned for the quickest possible reference, includes notes on the manufacturing limits of various 'Noral' alloys; data on the working of wrought and cast aluminium; the use of extruded sections for such purposes as handrails, windows and grilles. These sheets are illustrated by working drawings throughout.

Since architects are finding that aluminium claims an ever increasing amount of their attention, it is hoped that these sheets, prepared by a highly qualified architect, will simplify their task by making available all relevant data in its most accessible form. If you would like these information sheets for your files kindly fill in and post the form below.

NORTHERN ALUMINIUM CO. LTD

Bush House, Aldwych, London, W.C.2 • Telephone: Temple Bar 8844 • Telegrams: Noralux, Bush, London

AND AT BANBURY · BIRMINGHAM · BRISTOL · COVENTRY
GLASGOW · MANCHESTER · NEWCASTLE-ON-TYNE AND SHEFFIELD

A.R.14*

★ NORTHERN ALUMINIUM CO. LTD., BANBURY, OXON.
Please send me a set of Information Sheets on the application of
aluminium in architecture.

NAME _____
ADDRESS _____



Trade News and Reviews

By HENRY MORETON

Electric Organs

HAVE any of you heard the new electric organs which are going to revolutionize the old accepted principles of organ building? By electric organs I don't mean those gaudy monstrosities blazing with coloured lights that suddenly pop up out of the orchestra pit in cinemas and goad the audience to frenzy with complicated grunts and wails (not that I dislike the cinema organ, but only the way in which the average organist abuses it). The cinema organ is merely a pipe organ operated electrically. The type I am referring to is entirely electric. It has no pipes at all, the sound being produced purely synthetically.

To understand at all how it works, one must first realize that a note struck, for instance, on the piano, is not just a single note, but is, in fact, a combination of many notes, though the ordinary ear does not analyze it as such. If I play middle C, for example, I get not only that fundamental note, but in addition various harmonics, some above and some below, and it is the harmonics that give character to the sound. If I play the same note on the violin I get the same fundamental note but an entirely different combination of harmonics. That is why the violin and the piano sound entirely different, though they are playing the same note.

The principle behind all electric organs is to produce electrically a full range of pure notes (i.e. without harmonics), and by mixing cocktails, as it were, of different

notes to reproduce any desired tone. The tone builder takes his middle C, for example, adds a dash of the second harmonic, a good chunk of the third, a bit of the next, and so on, and thus builds up the tone he wants whether it be reed or trumpet or the like.

As far as actual playing is concerned, the controls are the same as those of the ordinary organ, and they sound exactly like ordinary or, rather, like extremely good organs, and the resources of tone are greater than those of any but the very largest, multi-manual affairs with stops all over the place.

The advantages are: Firstly, the cost is relatively low—anything from £400 to £750. Secondly, you don't need space for pipes. The instrument consists of a console about 6' square and a reproducing unit about the size of a fairly large radiogram, so it becomes reasonably possible for moderately wealthy people to have an organ in the home.

Another advantage from the architect's point of view is that weight as well as space is saved, a useful point in the construction of choir galleries in churches.

Incidentally, there is no need to have the console near the loud-speaker. All you need is a cable connecting the two and a mains connection to the console. Naturally the loud speaker must be put in a suitable position from the acoustic point of view, but many of these difficulties disappear because it is possible to have two or more loud speakers to deal

with large buildings or with dead spots in a building.

Go and hear one anyway—they really are very amusing and very interesting. I have heard of three makes so far:

The Hammond.

English Distributors—
Boosey and Hawkes, Ltd.,
295, Regent Street, W.1.

The Compton.

The John Compton Organ Co., Ltd.,
Chase Road, N.W.10.
and

The Midgley-Walker.

J. W. Walker & Sons, Ltd.,
Braintree Road,
Ruislip Manor, Middlesex.

•

Planned Reproduction

Architects who use arc lamps for planned reproduction and have technical minds may like to obtain a booklet called "Enclosed Arc Lamp" issued by Messrs. Charles H. Champion & Co., Ltd., 60, 66, Wardour Street, London, W.1. This exhaustive, I nearly said exhausting, treatise gives the low-down on what happens inside an arc lamp. It tells you how to spot troubles and how to remedy them. Personally, I couldn't follow more than half of the more abstruse technical

TRADE AND CRAFT



A fundamental principle of better lighting ...

The brighter the reflector used for lighting, the less wattage will be needed for adequate illumination. The General Induction Co. Ltd., to whom we have been privileged to supply NA. 2S sheet for reflectors, have recognised this principle and assert that aluminium is second only to silver in its reflective power. Added advantages of aluminium when suitably treated are its freedom from

tarnishing and scratching, which gives extra efficiency and long life to the reflecting surface. Moreover, the essential lightness of aluminium is a valuable asset for portable reflectors and flood-lighting equipment, enabling them to be moved with the minimum time and labour, and reducing the strength required in supporting structures. Aluminium fittings can be anodized in a variety of pleasing colours

to harmonise with interior decoration or, if used out of doors, to blend unobtrusively with natural backgrounds. At the same time, the resistance offered by aluminium to corrosion is a guarantee of long life for out-of-door installations. Our Advisory Service Department will be glad to supply information on the uses of Noral aluminium products for lighting and decoration in architecture.

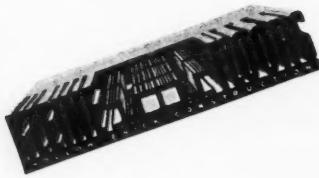


NORTHERN ALUMINIUM CO. LTD.

Bush House, Aldwych, London, W.C.2 · Telephone: Temple Bar 8844 · Telegrams: Noraluco, Bush, London

AND AT BANBURY, BIRMINGHAM, BRISTOL, COVENTRY, GLASGOW, MANCHESTER, NEWCASTLE-ON-TYNE & SHEFFIELD
E.L.9

ESTIMATE
FOR



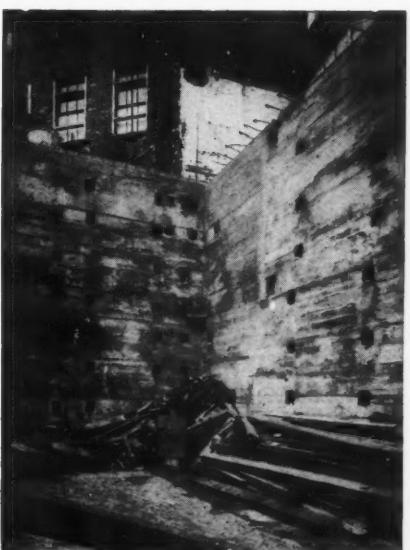
It is almost a *sine qua non* that a Kleine estimate be obtained for the construction of fire-resisting floors, no matter what the type of building or in which part of the country it is located. As well as being keenly competitive, a Kleine estimate states the cost of a floor construction proven over a period of 35 years to be of unquestionable quality.

THE KLEINE COMPANY LTD.
NEW OXFORD HOUSE, BLOOMSBURY WAY, W.C.1

Established 1905. Telephone: Holborn 8321.
Provincial Offices: Manchester, Birmingham, Nottingham,
Leeds, Newcastle, Brighton, Bristol, Bedford, Glasgow.

The Kleine Company Limited
New Oxford House, Bloomsbury Way, W.C.1
Established 1905 Telephone: Holborn 8321
Provincial Offices: Manchester, Birmingham,
Nottingham, Leeds, Newcastle,
Brighton, Bristol, Bedford, Glasgow.

NECESSITY WILL BROOK NO DELAY



BOURNEMOUTH. Basement 30 ft. deep in water-bearing sand, to new WOOLWORTH Store. Reinforced concrete floor and retaining walls waterproofed with

'PUDLO'
BRAND
CEMENT WATERPROOFER

If an air raid shelter is actually needed for protection, there will be no time to pump out flood water, and it would add greatly to the distress of those in it if pumping had to be continued, by hand, during occupation, when the air supply is restricted. The waterproofing of underground shelters does not differ materially from the waterproofing of deep basements, and for more than thirty years such problems have been successfully solved by the use of carefully graded concrete, adequately reinforced and made impervious by the addition of 'PUDLO' Brand cement waterproofer. Here are illustrated two examples of deep basements so waterproofed, both being surrounded by water-bearing sand. In all such structures, careful attention must be paid to the formation and disposition of construction joints, and in that—as in any other matter connected with the use of 'PUDLO' Brand waterproofer—we are glad to be of all the help possible.



MONTREAL, CANADA. This new WOOLWORTH Store also has its basement structure of reinforced concrete made impervious with 'PUDLO' Brand cement waterproofer. The subsoil was described as "a soft jelly-like mixture of clay and quicksand."

ARCHITECTS:
ARCHIBALD & ILLSLEY, Montreal.

CONTRACTORS:
RICHARD & E. J. RYAN LTD., Montreal.

KERNER-GREENWOOD & COMPANY, LIMITED.
MARKET SQUARE,
KING'S LYNN

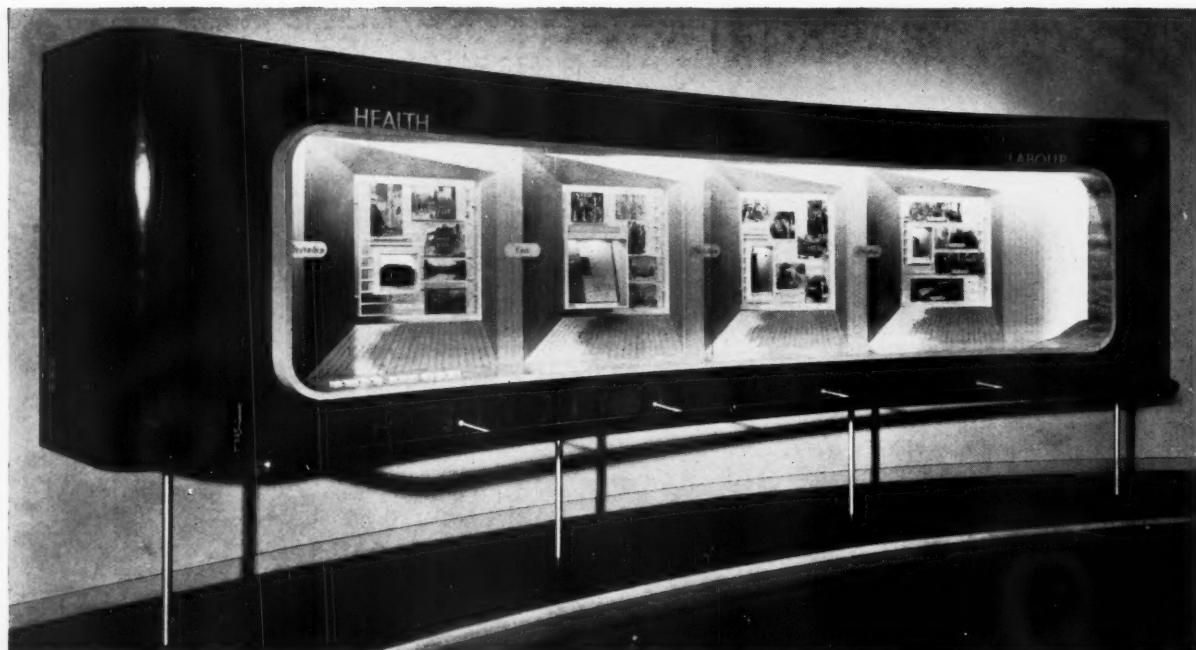
Sole Proprietors and Manufacturers

Od. P. St.

The word 'PUDLO' is the Registered Trade Brand of Kerner-Greenwood & Co., Ltd., by whom all articles bearing that Brand are manufactured or guaranteed.

TEAK

for dignified display



BRITISH PAVILION,
WORLD'S FAIR

Teak, both solid and veneer, was the wood used almost exclusively for showcases and display fittings in six sections of the British Pavilion. Designer, Misha Black.

Teak is a quiet timber, neither exotic nor flamboyant, and therefore admirable for use where a dignified but not too distracting background is needed, as in exhibitions, shops or art galleries.

In grain Teak is usually restrained, but very attractive designs may be obtained by careful matching of veneers, both those cut from normally grained logs and those from the relatively scarce logs carrying figure. Its colour varies from a soft golden tone to a rich brown. When colour and grain are used skilfully, it gives a grand effect.



4 CROSBY SQUARE, LONDON, E.C.3

Visit our displays at the Building Centres in London and Glasgow.

Teak—*Tectona grandis*

The chief Empire source of this timber is Burma, which supplies 85% of the imports of Teak into this country. Beware of so-called "Teaks" which are not *TECTONA GRANDIS* and therefore not Teak, and specify

B U R M A T E A K

Stoneham & Kirk.

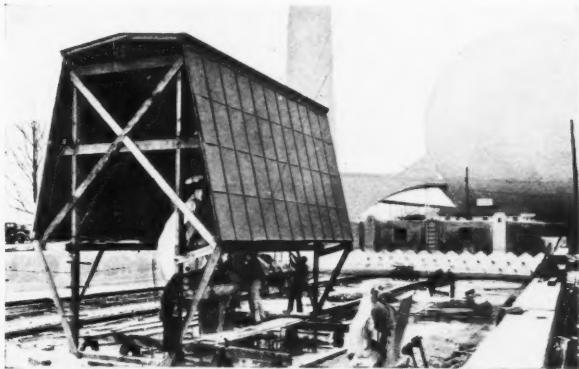


Illustration shows "SISALKRAFT" 6-ply Building Paper completely protecting statue and the workmen during construction.

SISALKRAFT DOES A BIG JOB

At the NEW YORK WORLD'S FAIR thousands of yards of "SISALKRAFT" were used for the protection of buildings during construction and also for built-in purposes such as sarking, floor and wall lining, and concrete curing. This remarkable Building Paper was chosen because of its amazing degree of toughness, durability, water and airtightness—due to its unique 6-ply construction—which is unrivalled by any other type of building material.

★ Some of the purposes for which "SISALKRAFT" was employed included :

TEMPLE OF RELIGION

Curing concrete floors.

FIRESTONE TYRE EXHIBIT

Protecting mastic-tile floors during construction.

HEINZ BUILDING

Protection of linoleum floors throughout.

GENERAL MOTORS EXHIBIT

Entire building was sheathed in "Sisalkraft" until ready for opening. Everything needing protection in this building was protected with "Sisalkraft."

Every Architect will attach importance to the literature, drawings, information, and samples of "Sisalkraft" and Copper Armoured "Sisalkraft."

★ Please send for them today

SISALKRAFT

TRADE MARK

Sole Distributors for British Sisalkraft Ltd.

J. H. SANKEY & SON, LTD.

EST. 1857

ALDWYCH HOUSE, ALDWYCH, LONDON, W.C.2

Made in Kent at Rochester

Telephone : HOLborn 6949 (14 lines)

Telegrams : Brickwork, London.



WHISKERS and WALLPAPERS

The schoolboy expresses his apathy towards the familiar by saying that "it has whiskers on it." And there are still one or two architects who unwittingly feel the same way about wallpapers in relation to modern decorative media.

We would like to show them how far wallpaper design has progressed from the "whiskers" era, how it has advanced step by step even with architecture itself. We would like to show them, at the Sanderson showrooms, stimulating conceptions for wall treatments that are not by any means merely imitations of something better but pioneering ideas which achieve their purpose more effectively than any other media.

ARTHUR SANDERSON & SONS LTD.
52-53 BERNERS STREET, W.1, and at Glasgow



FURDECOR LTD. 17 MORTIMER ST., W.I.
FURNITURE, DRAPERY AND CARPET IN THE
BRITISH PAVILION, NEW YORK WORLD'S FAIR

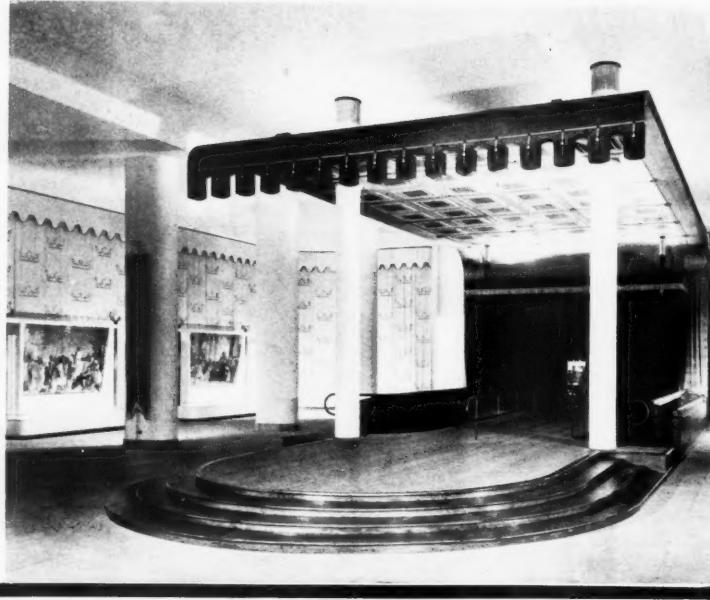
(UNDER THE DIRECTION OF THE ARCHITECTS, MESSRS. STANLEY HALL & EASTON AND ROBERTSON, F.R.I.B.A.)

THE MAGNA CARTA HALL

Wall hangings of ivory velvet
stencilled in gold

The ceiling of the dais in
garter blue satin printed in
gold and quilted

Hangings behind the case
enclosing the document are of
red velvet, trimmed gold, and
the case decorated with red
gold leather quilted and nailed



E. & F.

G. TUCKER & SON, LTD. LOUGHBOROUGH
LEICESTERSHIRE

We invite you to write
for this Booklet

The fine illustrations in actual colours will give you an impression of some of the artistic Facing Bricks and Roofing Tiles produced by Tucker's of Loughborough. These products, made from plastic clays by skilled workers and correctly burnt in pyrometer controlled kilns, are of the highest quality. Please write now for this reference booklet of Tucker's Hand and Machine-made Sand-faced Facing Bricks and Hand-made Sand-faced Roofing Tiles to Dept. A.3.

Telephones : Loughborough 2446-7
Telegrams: Tucker's, Loughborough

Manchester Office : 29 Princess Street

Manchester, 2

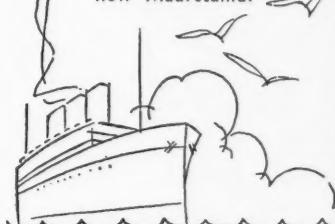
Established 1850



ROSEBANK FABRICS

On the New Mauretania

It is the Cunard White Star tradition that every detail in the equipment of their liners shall be the best that modern science can produce. This exquisite woven Rosebank fabric in warm peach tones was chosen to represent twentieth-century furnishing fabrics in the new Mauretania.



★ **TURNBULL AND STOCKDALE LIMITED**

Rosebank Print Works, Ramsbottom, Manchester. London House: Kent House, Market Place, Oxford Circus, London, W.1.

15

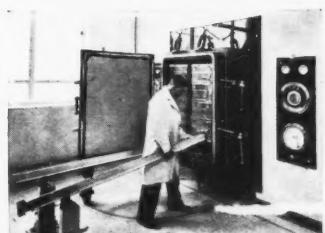
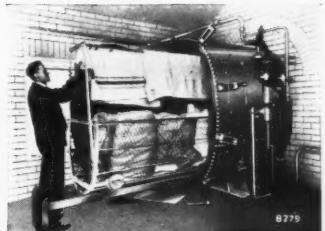
HOSPITAL EQUIPMENT

including

Disinfectors
and Sterilizers,
Incinerators,
Laundry
Machinery

COMPLETE PLANTS OR SEPARATE
MACHINES SUPPLIED.

Manlove, Alliott & Co. Ltd.
ENGINEERS NOTTINGHAM
London Office :
41 & 42, Parliament Street, Westminster, S.W.1





New Telephone Exchange
St. Sampsons, Guernsey, G.I.

ABERTHAW

PORTLAND CEMENT

Sole Sales Agents :

T. BEYNON & CO., LTD.

MERTHYR HOUSE, CARDIFF

Telegrams :
Beynon, Cardiff

Telephone :
Cardiff 5220 (6 lines)

LONDON OFFICE: 3739 LIME STREET, LONDON, E.C.3



SUMMIT HOUSE, RED LION SQUARE, W.C.
Architects : Messrs. P. J. Westwood & Sons, F.R.I.B.A.

GIBBS & CANNING LIMITED

**GLASCOTE WORKS
TAMWORTH STAFFS.**

Telephone : 47 TAMWORTH

Manufacturers of
FAIENCE TERRA-COTTA
also
UNGLAZED STONE GREY

THE ILLUSTRATION SHOWS
A RECENT EXAMPLE OF
THE COMPANY'S WORK

Write for Samples and
Illustrated Booklet

PLAND PRODUCTS

STAINLESS STEEL SINKS & SINK UNITS

are ideal for use in the modern house or flat and are available in a large range of standard sizes, either right- or left-handed.

'PLAND' PRODUCTS are made in one piece, are Hygienic and Labour-saving and are built to last a lifetime.

In association with the Taylor Rustless Fittings Co. Ltd., we can meet almost all requirements for Stainless Steel Products.

Let us send you complete details of our Sinks and Sink Units, Architectural Fittings, Door Furniture, Stainless Steel Fittings for Butchers' Shops, etc., etc.

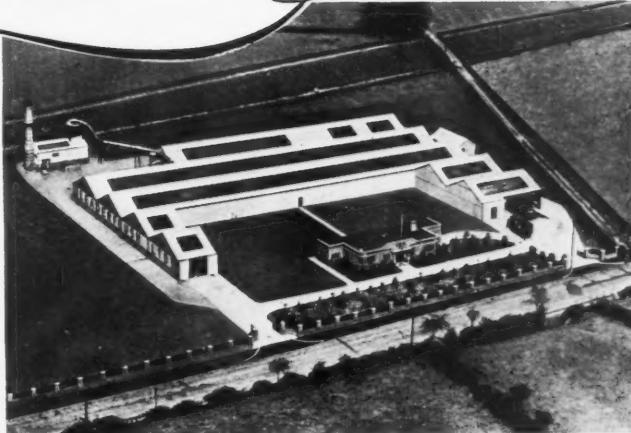
STAINLESS STEEL SINK CO. LTD.

LEEDS: Ring Road Lower Wortley Phone: Armley 38711

LONDON: 40 Wood Street Westminster, S.W.1 Phone: Abbey 1575

FROM THIS GREAT MODERN FACTORY COME BRITAIN'S FINEST FLUSH DOORS

Our new Factory and Mills at Trowell, Notts, are the most modern and progressive in the country and have been planned and equipped to ensure the rapid production in quantities of our doors without any sacrifice of their high quality. Architects, builders and other interested persons are invited to inspect the factory and the methods that make possible the production of a better flush door than has ever been made before. Leaderflush Ltd. Stapleford Road, Trowell, Notts. Telephones: Ilkeston 623 and 624.



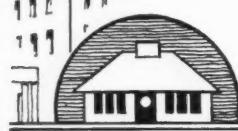
LEADERFLUSH
Guaranteed Flush Doors

BEAUTY THAT LASTS
STRENGTH THAT ENDURES

COGENT

"WHITE ROSE" BOILERS

For buildings large
or small



The extensive range of designs of "White Rose" Sectional Boilers covers every need of Central Warming by Hot Water or L.P. Steam in all types of buildings.

All boilers are constructed to ensure maximum durability and efficiency; correctly shaped flues, corrugated firebox and wide waterways. Send for full particulars.

Hartley & Sugden Ltd. WHITE ROSE
BOILER WORKS
HALIFAX, England

LONDON OFFICE:

357 EUSTON Rd., N.W.1. Also at: BIRMINGHAM, BRISTOL, GLASGOW, MANCHESTER, SHEFFIELD

A. R. P.

ROAD AND KERB MARKING
PAINTS

BLOT-OUT PAINTS FOR
WINDOWS

CAMOUFLAGE PAINTS
OPAQUE LAMP LACQUERS

ANTI-GAS COATINGS
LUMINOUS PAINT

ROBERT KEARSLEY & CO., RIPON, YORKS



By Appointment
to the late KING GEORGE V.

ARCHITECTURAL
METALWORK
WOODWORK
STAINED GLASS

BROMSGROVE GUILD LTD.
Bromsgrove, Worcestershire

LONDON · 199, Piccadilly, W.1

MANCHESTER · 76, Victoria Street

*the Pencil he uses makes all the
difference to his work*



A man must be satisfied with his pencil or his work will suffer. If a draughtsman is working continuously with a pencil that is not absolutely up to the standard he likes and requires, you, as his employer, will be the loser. That is why so many firms specify VENUS PENCILS. They know that the grading of the lead (made by the patented colloidal process), the smoothness and density of line and the finish are as good as it is possible to make them.

Make sure you, too, use VENUS PENCILS in your office and get the best work from your men.

VENUS PENCILS

VENUS PENCIL CO. LTD., LOWER CLAPTON RD., E.5

If you have any difficulty in being supplied, write direct to this address for sample, stating which degree you prefer.

**THE INTERNATIONAL
CONGRESS of ARCHITECTS**

WASHINGTON, D.C.
September 24th—September 30th, 1939

**BOOK YOUR PASSAGE & HOTEL ACCOMMODATION
AND MAKE YOUR RESERVATION FOR THE
OFFICIAL CONGRESS TOUR**

at any Office of the

AMERICAN EXPRESS

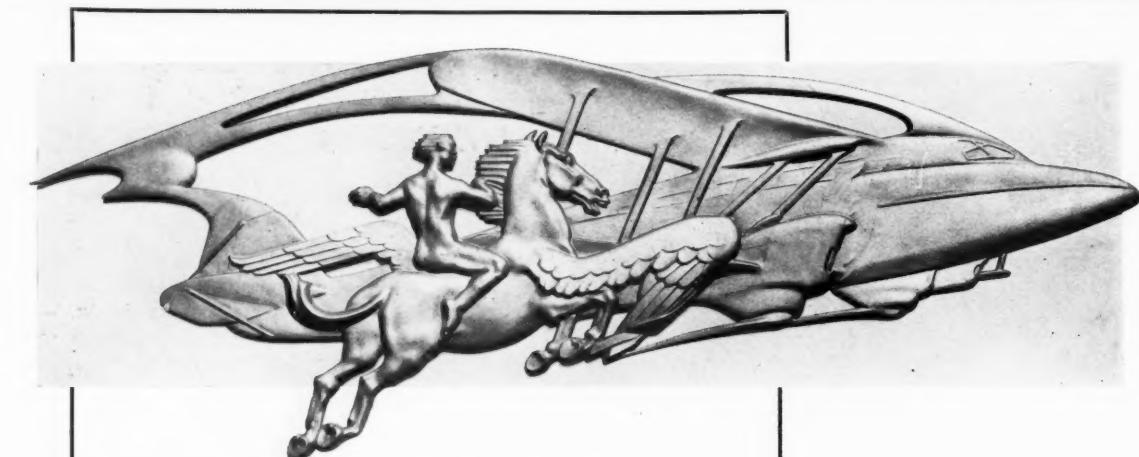
OFFICIAL TRANSPORTATION AGENTS OF THE CONGRESS

Safeguard your Travel Funds by carrying
AMERICAN EXPRESS TRAVELERS CHEQUES

The American Express can make all arrangements for your travel to any part of the world.
Tickets issued for travel by road, rail, sea and air; seats and berths reserved.

For escorted or independent tours, consult the American Express. Itineraries gladly submitted without obligation.
Hotel accommodation reserved and sightseeing excursions planned in advance.

*The AMERICAN EXPRESS Co. Inc.
6 HAYMARKET, S.W.1
'PHONE: WHITEHALL 4411*



DECORATIVE PANEL
DESIGNED BY MAURICE LAMBERT, ESQ.,
CAST IN 'AERAL'
ALUMINIUM ALLOY
(ALUMILITE FINISH)

by
**WILLIAM
MILLS LTD.**
GROVE STREET
BIRMINGHAM, 18



ANTIGASPHALT

THE Air Raid Precautions Department, (Home Office) has accepted "Antigasphalt" as a material which can be decontaminated satisfactorily; it can therefore be considered, from that standpoint, for use in Air Raid Precautions construction.

FOR PARTICULARS APPLY
THE LIMMER & TRINIDAD LAKE ASPHALT CO. LTD.
STEEL HOUSE, WESTMINSTER, LONDON, S.W.1

B.I. CABLES

IN MARISCHAL COLLEGE
ABERDEEN

Forty years ago, B.I. Cables were used in the wiring of this imposing building.

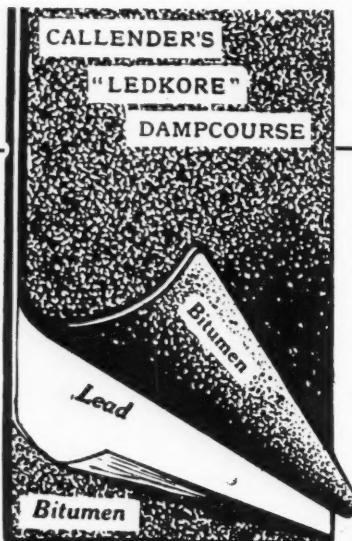
For the re-wiring of a portion of the premises B.I. Cables have again been used by the Contractors :

THE ABERDEEN ELECTRICAL ENGINEERING CO. LTD.
Registered Installation Contractors
17 BELMONT STREET, ABERDEEN



BRITISH INSULATED CABLES LTD., PRESCOT, LANCS.
Tel. No. Prescot 6571. London Office, Surrey House, Embankment, W.C.2. Tel. No. Temple Bar 7722

CALLENDER'S "LIBRA" "LEDKORE" LEAD AND BITUMEN DAMPCOURSE



DEPT. R.A. FOR FULL PARTICULARS

"LIBRA" has a core of Sheet Lead weighing 1 LB. PER SQUARE FOOT. Bitumen covering both sides.

No Coal Tar or Pitch.

In Standard Rolls of 24 feet in all usual wall widths.

Designed specially to meet the wish of Architects desiring heaviest lead inset.

Still cheaper than slates and cement because cost of laying practically nil.

Telephone: Abbey 5548/9

GEORGE M. CALLENDER & CO., LTD., 25 Victoria Street, London, S.W.1



Recently constructed premises for Messrs. KINGHAM'S, Northampton. Facade in Croft Adamant Reconstructed Clipsham Stone. Architects: Messrs. Law, Harris & Croft, Northampton.

CROFT GRANITE, BRICK, & CONCRETE CO. LTD.
CROFT, Near LEICESTER.
London Office: 15, Victoria Street, London, S.W.1

For The Modern Building

Croft Adamant Reconstructed Stone is indistinguishable from the natural and is of great strength and durability—most suitable for the modern building.

Croft Adamant Reconstructed Marble and Terrazzo are made in a wide variety of beautiful colourings excellent materials for modern interior decoration.

Architects are invited to write for samples and information to Dept. A.3.

**CROFT
ADAMANT**
RECONSTRUCTED STONE
MARBLE AND TERRAZZO

PRE-CAST UNITS FOR AIR-RAID TRENCHES

Telephones: NARBOROUGH 2261-2-3
Branch Office and Works: West Bank, Widnes

ALWAYS SPECIFY
**CROFT
ADAMANT**



Architects : Laurence M. Gotch, F.R.I.B.A., with Sir Edwin Lutyens, P.R.A.
Midland Bank Ltd., Poultry, London, E.C.2

KINNELL

HEATING

Ventilation & Hot Water Supplies
OIL or COKE-FIRED BOILERS, AUTOMATIC STOKERS

INSTALLATIONS FOR EVERY CLASS OF PRIVATE, PUBLIC & COMMERCIAL BUILDING

Recent Contracts include :

Lots Road Pumping Station, Chelsea, S.W.; Hogs Back Hotel, Seale, Farnham; Town Hall, Fulham, London, S.W.; London Keg & Drum Co., Ltd., Millwall Docks, E.; Maclean, Ltd., Gt. West Road, Brentford; Mills Equipment Co., Ltd., Tottenham; West Wickham Wireless Station, Kent; St. Michael's Church, Bishop's Stortford, &c. &c.

Heating Plant Installed to Extensions by Kinnells.

PLEASE SEND US YOUR ENQUIRIES.

BROCHURE OF CONTRACTS ON REQUEST.

CHAS. P. KINNELL & CO., LTD., 65, 65^A SOUTHWARK ST., LONDON, S.E.1

Telephone: WATERLOO 4144.

Painting on New Plaster!

ALBASITE, an entirely new product of Nobles & Hoare, having far greater resistance to water and alkali salts than the usual priming paints, may be applied to Patent Plaster as soon as the surface is reasonably hard, and the surface thus treated may be painted the next day without fear of flaking. ALBASITE dries flint hard yet at the same time has exceptional elasticity; it adheres closely to the smoothest surface yet dries with a slightly rough finish, an excellent key for subsequent coats of Undercoating, Gloss Paint or Flat Oil Paint. Surfaces primed with ALBASITE greatly enhance the gloss of the finishing coats, and there is no fear of chipping or discoloration. The resistance to water is so great that ALBASITE can be scrubbed after a few days without affecting the film. Bare brickwork and Lime Plaster surfaces may also be treated with ALBASITE, which is supplied in two qualities—for brushing or spraying. Write for further particulars.

A Plaster Surface properly treated with ALBASITE, may be painted the next day and finished with Oil Paint, Gloss Paint, or Enamel.

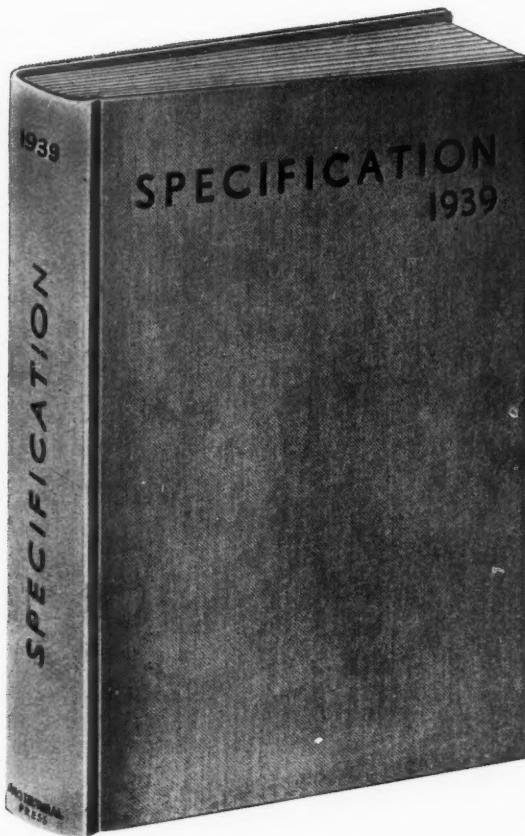
Albasite

A NEW PRODUCT OF NOBLES & HOARE LTD.
CORNWALL ROAD, STAMFORD STREET, LONDON, S.E.1

Telephone: WATERLOO 4694

SPECIFICATION 1939

Edited by F. R. S. YORKE, A.R.I.B.A.



This volume of nearly a thousand illustrated pages is divided into 26 sections covering the various branches of the building industry, with model Specification clauses appended to each section.

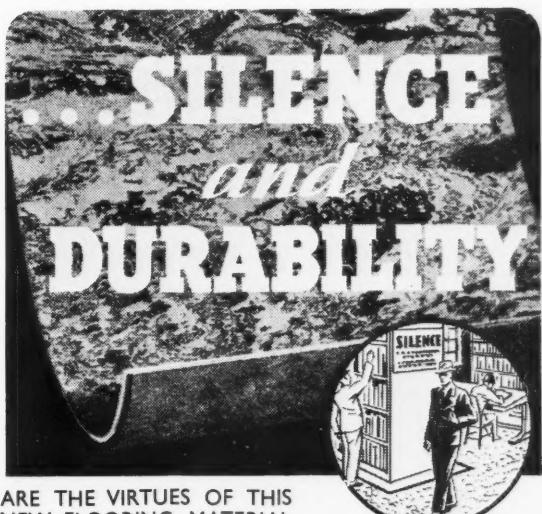
Very considerable revisions have been made in the 1939 edition with a view to increasing the usefulness of a publication that is designed to assist an architect when he is deciding what product or material he will specify and how he will specify it. Some of the more important subjects which have been added to their appropriate sections include: A.R.P.—STEEL EQUIPMENT—ANCHORAGE TO CONCRETE—NEW HEATING SYSTEM—COOKING EQUIPMENT—SANITARY ENGINEERING—ROAD CONSTRUCTION—ZINC WORKER—COPPER—FAIENCE SLAB WORK.

What "Building" says:

This book is now almost a library in itself. It grows bigger every year, until now it is nearly a thousand large pages, and it is amazing value for half-a-guinea. Indeed, Mr. Yorke this year seems to have made more additions and alterations than usual. Diagrams and tables largely take the place of articles and descriptive notes. The Specification clauses have been revised and extended and the trade divisions have been brought up to date. SPECIFICATION . . . should be in the office of every architect and builder.

Price 10s. 6d. Postage 1s. (Abroad 2s. 2d.)

Published by THE ARCHITECTURAL PRESS, 9 Queen Anne's Gate, London, S.W.1



ARE THE VIRTUES OF THIS
NEW FLOORING MATERIAL

The material consists of two layers:—A top layer of smooth hard wearing rubber flooring in varying thicknesses, which is washable and supplied in an attractive range of plain or marbled colours.

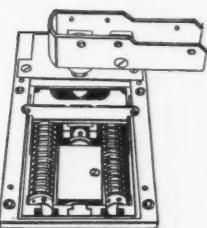
THE "SOUNDEST" PROPOSITION BECAUSE IT IS "SILENT"
Regd. No. 583716

VO-LA-TRED
CUSHION FLOORING
VOL-CREPE LIMITED · GLOSSOP · DERBYSHIRE

A bottom cushioning layer of VO-LA-FELT carpet underlay which gives the material its unique sound absorbing qualities.

The material is hygienic. Dust and Moth proof and easy to lay.

'VICTOR'
DOOR SPRINGS



The "Sceptre" Victor No. 21 Double Action Floor Door Spring, with Silent Check Action. Also Single Action Types.



WINDOW & GEARING
'X-IT' PANIC BOLTS
DOOR FURNITURE
LOCKS AND LATCHES
CASEMENT FITTINGS
PULLMAN BALANCES
SYMPATHETIC GEAR
BALUSTRADE
HANDRAILS, GRILLES
NAME PLATES, Etc.

ROBERT ADAM'S "VICTOR" SPECIALITIES ARE TO BE RELIED UPON FOR EFFICIENCY AND SERVICEABILITY. USED FOR THE BEST WORK EVERYWHERE, AND INSTALLED IN MOST BUILDINGS OF PROMINENCE

ROBERT ADAMS

ROBERT ADAMS (VICTOR) LTD.

1 & 2, ORCHARD STREET, WESTMINSTER, S.W.1
3 & 5, EMERALD ST., HOLBORN, W.C.1

Telephones — HOLBORN 9408 & 3532
ABBEY 2979

**THE
ARCHITECTURE
OF ENGLAND**

From Norman Times to the Present Day

By Frederick Gibberd, A.I.A.A.

An explanation of each period of English architecture, giving the historical and social background of the times, the evolution of the architecture, its characteristics, and the building achievement. Illustrated by numerous pictures of the life of the times, explanatory diagrams and photographs of buildings.

Price 5s. Postage 6d.

An illustrated prospectus will be sent on request to the Publishers:—

THE ARCHITECTURAL PRESS
9 Queen Anne's Gate, London, S.W.1

ARCHITECTS

increasingly avail themselves of the consultation and expert collaboration offered by the team of Display, Exhibition and other specialists represented by the

REIMANN STUDIOS

The Hall of Metal, British Pavilion, New York, illustrated in this issue, is a typical example.



Write for Reimann Studio Leaflet
4 REGENCY STREET, S.W.1



The "At a Glance" Series

English Architecture at a Glance

A simple review in pictures of the Chief Periods of English Architecture. 1s. 6d. net. Postage 2d.

English Furniture at a Glance

By CHARLES H. HAYWARD. Sixteenth to Eighteenth Centuries. 3s. 6d. net. Postage 3d.

English Rooms and their Decoration at a Glance

By CHARLES H. HAYWARD. Vol. I, 1066-1620; Vol. II, 1620-1800. 3s. 6d. net. Postage 3d.

Sailing Ships at a Glance

By EDWARD W. HOBBS, A.I.N.A. From the earliest times until today. 3s. 6d. Postage 4d.

THE ARCHITECTURAL PRESS LTD.

9 QUEEN ANNE'S GATE, WESTMINSTER, S.W.1

PLANNED A. R. P.

BASED ON THE INVESTIGATION OF STRUCTURAL PROTECTION AGAINST AIR ATTACK IN THE METROPOLITAN BOROUGH OF FINSBURY.

By Messrs. Tecton, Architects

In this book an attempt is made for the first time to assess the actual protective value of different types of shelters, and then by comparing their cost, to arrive at their value for money.

The character and effects of Air-Raids which are to be expected in the event of war, the different types of bombs and their effects, are described and vividly illustrated.

The authors then analyse the various recognised types of shelters and suggest methods of improvement. Some entirely new designs considered to be more efficient and at less cost, are given.

Finally, the authors' own scheme for the Borough of Finsbury is fully discussed and illustrated. This scheme gives protection for the whole population in the Borough against bombs up to one ton in weight by means of large shelters holding 7,000 to 12,000 people, equipped with air-conditioning plant, electric lighting, lavatories, warden posts, decontamination chambers, etc. The financial calculations for the whole scheme are set out.

The size of the book is 10 in. by 7½ in., containing 156 pages including 120 illustrations. Price 5s. Postage 6d.

Published by

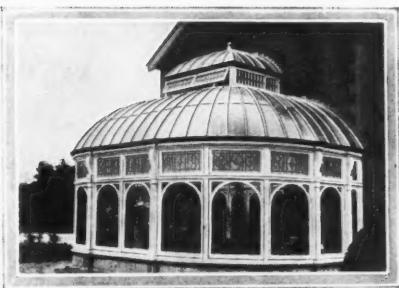
THE ARCHITECTURAL PRESS, 9 QUEEN ANNE'S GATE, LONDON, S.W.1

GARDENS IN THE MODERN LANDSCAPE

By Christopher Tunnard

Although of recent years revolutionary ideas have developed in the design and planning of houses, the garden has not been similarly discussed. The author of this book is the first to draw attention to the need for applying the same creative thought to the planning of the modern garden and traces the history of garden design in a way that shows its relation to contemporary life and landscape. 188 pages with 210 illustrations. 15s. Postage 6d. inland.

THE ARCHITECTURAL PRESS, 9 QUEEN ANNE'S GATE, LONDON, S.W.1



MODERN GLASSHOUSES.

Replete with the latest improvements in construction, ventilation and heating, based upon experience extending over more than half a century as specialists in this class of work.

Architects' Designs carefully carried out.

Special Catalogue, with numerous illustrations, on application.

MESSENGER & CO., LTD.,

Horticultural Builders and Heating Engineers,
LOUGHBOROUGH, Leicestershire.

London Office : 122 VICTORIA STREET, WESTMINSTER, S.W.1

Telephone : 2691 LOUGHBOROUGH; 5409 VICTORIA, LONDON.

PRODORITE

Product No. 6 Catalogue on request

**ACID-PROOF FLOORING
(PRODORITE SYSTEM)**

We can cater for weak and strong Acids, also Alkalies. We have laid numerous floors in Bacon Factories, Preserve Works, Confectionery Works and other allied trades.

Work laid and guaranteed by our own Contracts Department or Materials supplied with Service

PRODORITE LTD, EAGLE WORKS, WEDNESBURY, STAFFS.

THE IMPERMEABILITY OF ASPHALT
plus
THE INDESTRUCTIBILITY OF ASBESTOS
equals
THE PERMANENCE OF ASTOS

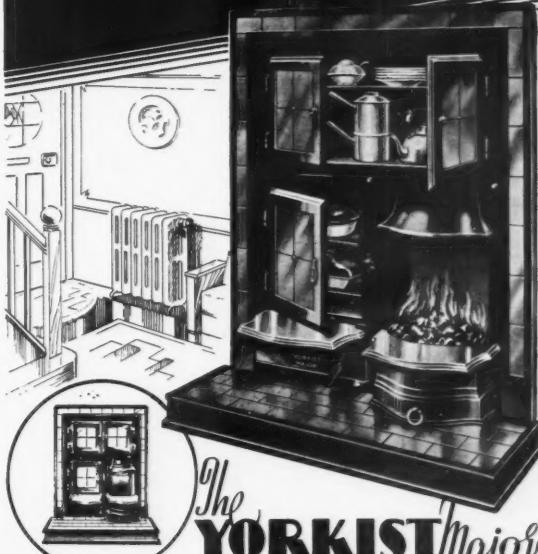


School: Burton-on-Trent. Standard Astos Dampcourse used throughout. Architect : G. Wyville Home, Esq., F.R.I.B.A. (Home & Knight) A balanced homogeneous compound of Asphalt and Asbestos, Astos may be said to combine the advantages of both the rigid and flexible types of dampcourse. 100% mineral in composition, it contains no perishable ingredient. Detailed information in the form of a highly interesting illustrated brochure will be forwarded on request.

Astos { the 100%
MINERAL
DAMPCOURSE

THE RUBEROID Co. Ltd. 104, Lincoln House, High Holborn, London W.C.1

*The appeal of Beauty in
Permanent "Lexos" porcelain*



WILSONS &
MATHIESONS LTD.
ARMLEY, LEEDS

Famous for its perfect Cooking, Warmth, and ample Hot Water Supply.
CATALOGUE SENT ON REQUEST



GLAS-CRETE CONSTRUCTION
LETS
DAYLIGHT IN
AT



WELWYN STORES, WELWYN GARDEN CITY, WELWYN

LOUIS DE SOISSONS, Esq., F.R.I.B.A., S.A.D.G.

"Glas-Crete" Roof and Lantern Lights are so designed that although admitting the maximum of light, they can be loaded with sandbags as protection against incendiary bombs, splinters & blast.

As the glass area is divided into a number of small squares (approx. 1-in. thick) which are supported on reinforced concrete ribs, any damage done is localized.

J. A. KING AND COMPANY LIMITED

181 QUEEN VICTORIA STREET, LONDON, E.C.4

Telephone: CENTRAL 5866 (6 lines)

Branches: —BRISTOL LEEDS

Telegrams: KINOIQUE CENT, LONDON

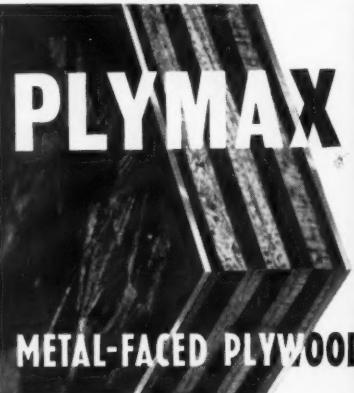
SHEFFIELD GLASGOW

P L Y W O O D
A N D
V E N E E R

The advertisements in the following pages have been grouped together for the greater convenience of the reader.

They form a useful and well illustrated extension to the editorial supplement on Plywood published in this number.

V E N E S T A P R O D U C T S



PLYMAX

METAL-FACED PLYWOOD

Magnified to show construction

Plymax is Venesta plywood covered on one or both sides with metal sheets. The metals generally used are Galvanised Steel, Aluminium and Zinc. The material has properties of great rigidity and lightness. It is damp-proof and hygienic, can be easily worked and erected and does not deteriorate in storage. Some of the uses of Plymax are illustrated in this advertisement and are indicative of the wide variety of uses to which it can be put in shops, offices, factories, public buildings, schools, hospitals and municipal work. We manufacture a number of standard units made in Plymax—such as W.C. Compartments, Cubicles, Office and Factory Partitions, Doors, Pipe Casings and Access Panels, Towel and Beaker Fittings—that are delivered ready for immediate erection. For further information about Plymax, or Plymax Standard Units, please get in touch with our PLYMAX DEPARTMENT.



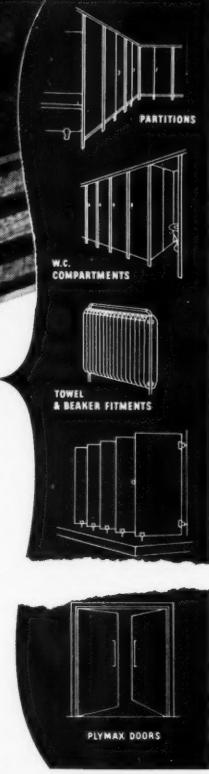
Facts About Plymax
Send for our booklet on
Plymax Unit Construction



**THIS IS
PLYMAX**

*Magnified
to show
construction*

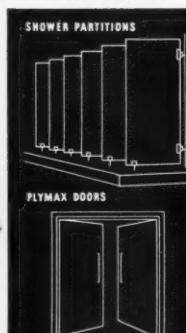
Plymax is metal-faced Venesta plywood. Its construction combines the rigidity of steel with the lightness of wood. It presents a smooth, hard surface that is damp-proof, vermin proof and almost indestructible. It is quick and easy to erect, or re-erect, and takes up the minimum of space. It takes paint well, and is inexpensive to maintain. Plymax has a hundred and one uses for partitions, linings, doors, bench and counter tops, pipe casings, compartments and cubicles in factories, shops, hospitals, swimming baths—for many jobs, in fact, in any kind of building! We also supply, ready for immediate erection, a number of Standard Units, such as W.C. Compartments, Office Partitions, Towel and Beaker Fittings, Doors and further information about these is available from our PLYMAX DEPARTMENT.



Facts About Plymax
Send for our booklet on
Plymax Unit Construction



**THIS IS
PLYMAX**

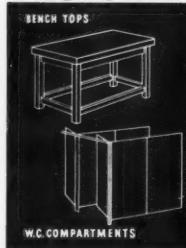


WITH 101 USES IN FACTORIES

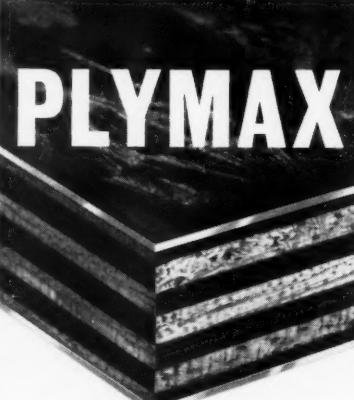
Magnified to show construction

Plymax is Venesta plywood covered on one or both sides with metal sheets. The metals generally used are Galvanised Steel, Aluminium and Zinc. The material has properties of great rigidity and lightness, and is almost indestructible. It is damp-proof and hygienic, can be easily worked and erected, and easily cleaned. Plymax W.C. Compartments are made in standard units ready for erection, and can be quickly dismantled and re-erected if necessary. For further information about Plymax and its uses please get in touch with our Plymax Department.

PLYMAX FOR A.R.P. Plymax Doors for airlocks and gas-tight rooms cannot warp. Plymax linings for decontamination centres can be quickly hoisted down, and the rigidity and flatness of the sheets simplifies the construction of gas-tight joints



VENESTA LIMITED · VINTRY HOUSE · QUEEN STREET PLACE · LONDON · EC4 · CENTRAL 6580



PLYMAX

*Magnified
to show
construction*

What it is...

What it does...



Facts About Plymax
Send for our booklet on
Plymax Unit Construction

VENESTA PRODUCTS



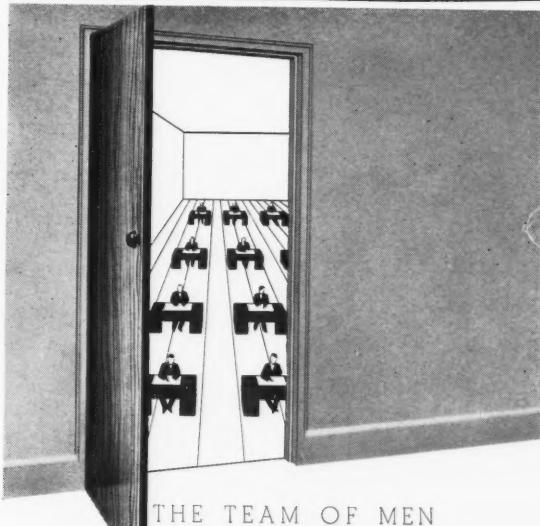
THERE'S A **TOUGH** SKELETON

BEHIND VENESTA **PLYWOOD**



**FLUSH
DOORS**

Not only are the surface panels of Venesta Plywood flush doors extra thick, but the frames are extra strong. Type A doors have 3 mm. of kiln-dried British Columbian Pine straight grained and free from shakes. Type B doors are solid construction made of Venesta block-board with a solid hardwood lipping on both vertical edges. That is one reason why Venesta Plywood Flush Doors can be guaranteed for 5 years against the development of any fault due to bad manufacture. For further particulars, or any kind of information or help, please get in touch with our DOOR DEPARTMENT.



THE TEAM OF MEN

BEHIND VENESTA

PLYWOOD

FLUSH DOORS

The buyer and the research scientist, the factory manager, the process worker, the finisher, the office and transport manager, all play their part in ensuring the excellence of Venesta Plywood Flush Doors. From first to last their production is in the hands of expert men. The organisation we have built up enables us to make many different kinds of door and to give quick delivery of any particular variety. It enables us, too, to guarantee any Venesta Plywood Flush Door for five years against any defect due to bad manufacture. For further particulars about Venesta Plywood Flush Doors, or any kind of information or help, please get in touch with our DOOR DEPARTMENT.



VENESTA LIMITED, VINTRY HOUSE, QUEEN STREET PLACE, LONDON, E.C.4. TELEPHONE: CENTRAL 6580



WE can say confidently that this product does not set out to cure pains in the neck, housemaid's knee, clergyman's sore throat, pink toothbrush, nor any of the other unmentionable things that are to-day so widely advertised. Nor do we give away with each door a life insurance scheme which will provide for the education of your wife and children, but we do give an unqualified Guarantee worded like this:—

"*Regardless of any maintenance clause in a building contract, however worded, if a Venesta Plywood Flush Door develops any fault due to bad manufacture within five years from the date of its supply, Venesta Ltd. will supply a new door ready for fixing and finishing."*

**VENESTA
PLYWOOD
FLUSH DOORS**



EXTRA **THICK** SKIN ON

VENESTA

PLYWOOD

FLUSH

DOORS

This surface skin of Venesta plywood flush doors is 6 mm. thick sanded down to 5½ mm. as opposed to the usual thickness of 4 mm. sanded down to 3½ mm. This extra thickness ensures a permanently flat smooth surface without any waves. Venesta plywood flush doors are finished in a wide variety of plain and decorative veneers, the same on both sides, or in different combinations. For further particulars, or any kind of help, or information, please get in touch with our DOOR DEPARTMENT.

VENESTA PRODUCTS



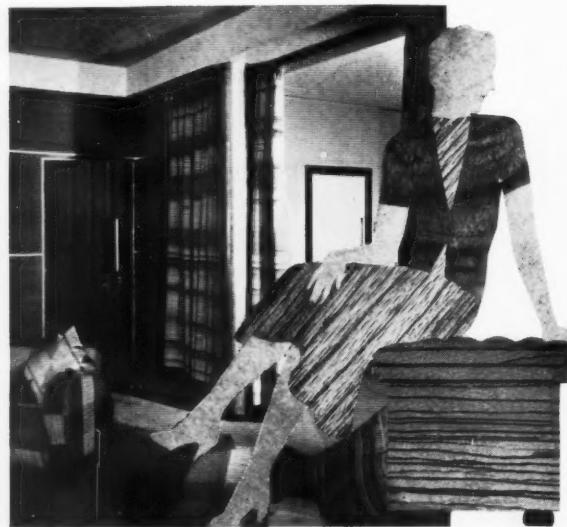
**SUITED
TO ANY ROOM**

With carefully selected Venesta panelling, any room can be brought into exact tune with its decorative and furnishing theme. There is a choice of over forty veneers, of every shade from silver to jet, and there are Venesta Flush Doors which match to make the scheme complete. We shall be pleased to give you advice on all questions concerning the use of Venesta decorative plywood, and you are invited to write for our illustrated booklets which are available free of charge.



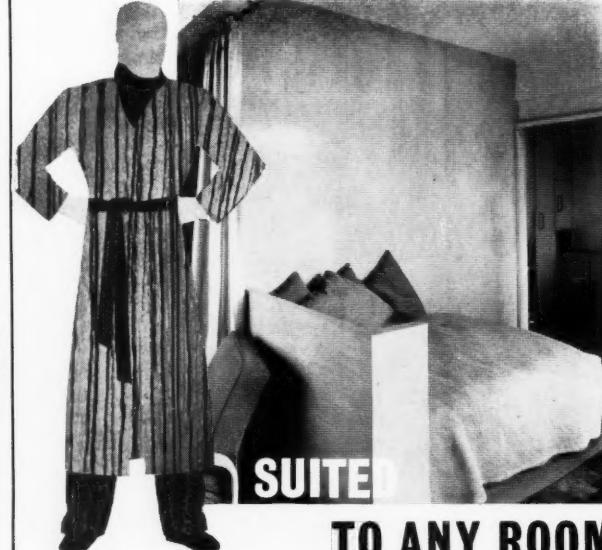
**SUITED
TO ANY ROOM**

Nothing lends itself more wholeheartedly to happy matching and harmonious contrasts than wood veneer paneling. With a variety of more than forty different woods to choose from, Venesta veneered plywood gives every desired nuance of shade and character, while a Venesta flush door, veneered to match, completes the effect. We shall be pleased to give you advice on all questions concerning the use of Venesta decorative plywood, and you are invited to write for our illustrated booklets which are available free of charge.



SUITED TO ANY ROOM

Walls, doors, furniture, carpets, drapings—each contributing towards the effect you want. That is the basis of any decorative scheme, and it begins with walls and door. Beautiful wall paneling selected from more than forty decorative veneers: a flush door in harmony, or effective contrast. We shall be pleased to give you advice on all questions concerning the use of Venesta decorative plywood, and you are invited to write for our illustrated booklets which are available free of charge.



**SUITED
TO ANY ROOM**

Delightful, unusual effects can be obtained by using Venesta panelling and veneered Flush Doors as an integral part of a decorative scheme. There are more than forty different veneers to choose from. Colours can be matched, or contrasted. The room can be made sombre or lively, exotic or workaday, according to its purpose. Period, style and fashion—all can be catered for with equal success. We shall be pleased to give you advice on all questions concerning the use of Venesta decorative plywood, and you are invited to write for our illustrated booklets which are available free of charge.



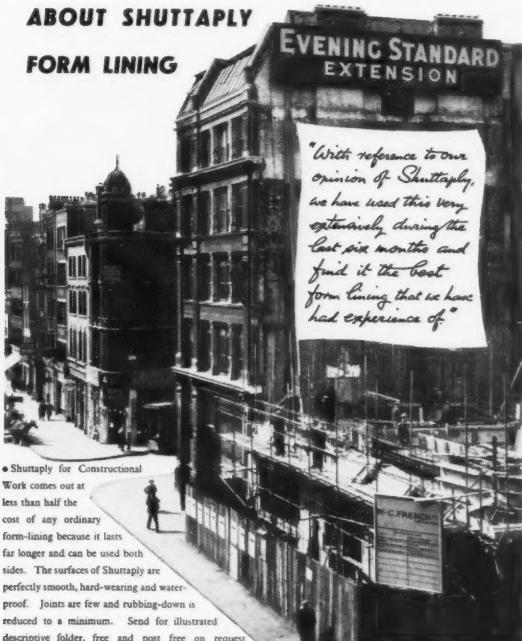
VENESTA LIMITED · VINTRY HOUSE · QUEEN STREET PLACE · LONDON EC4 · CENTRAL 6580

VENESTA PRODUCTS

SEE WHAT THE CONTRACTORS SAY

ABOUT SHUTTAPLY

FORM LINING



• Shuttaply for Constructional Work comes out at less than half the cost of any ordinary form-lining because it lasts far longer and can be used both sides. The surfaces of Shuttaply are perfectly smooth, hard-wearing and waterproof. Joints are few and rubbing-down is reduced to a minimum. Send for illustrated descriptive folder, free and post free on request.

VENESTA LIMITED



"IT'S BEEN A GODSEND TO ME!" says Mr. TAYLOR, Chief Supervisor,

Commercial Structures Ltd. "I've been getting some surfaces I'm damn well proud of.

On one big job we did it cost us close on £50 a week just for rubbing down and

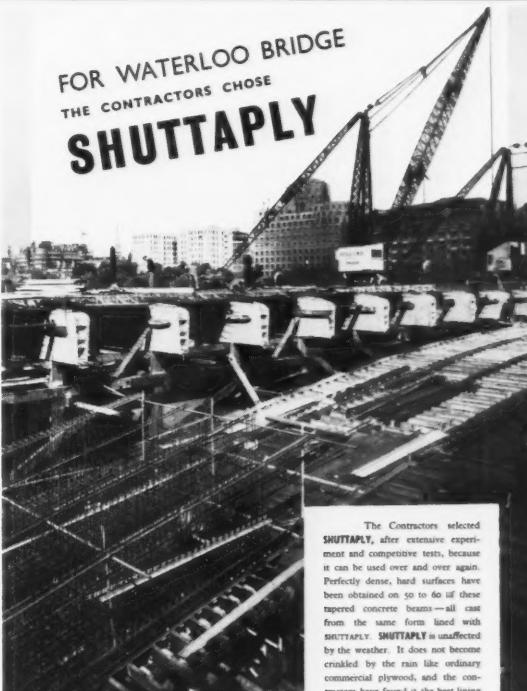
finishing! I tell you—now we use this SHUTTAPLY we don't have to do any

rubbing down; my painter does all the finishing that's necessary. We work pretty fine

on these jobs, y'know, so it's been a godsend to me, this stuff."



"IT DOESN'T CRACK OR BREAK like some form linings I've used" says Mr. SANDERS of the Norwest Construction Company Ltd., on the new "Daily Express" building in Glasgow. "In spite of the rough wear and tear the shutters receive during steel-fixing and from general foot traffic on the job, SHUTTAPLY keeps its strength and smooth surface and continues to produce fine, finished work. It saves pounds a week in rubbing-down costs and it gives a better job at the same time." . . . "Yes, it certainly cuts the cost" adds Mr. HARPER, Foreman Joiner, "because it gives a finish that doesn't need rubbing down, and you can use both sides of the same board over and over again."



Approved Engineers: Rendel, Palmer & Tritton
Approved Architects: Sir Giles G. Scott, K.B.E.
Contractors: Peter Lind & Co. Ltd.
Chief Engineer, L.C.C.: T. Peirson Frank, M.I.M.E., F.R.S.

The Contractors selected SHUTTAPLY, after extensive experiment and competitive tests, because it can be used over and over again. Perfectly dense, hard surfaces have been obtained on 50 to 60 of these tapered concrete beams—all cast from the same form lined with SHUTTAPLY. SHUTTAPLY is unaffected by the weather. It does not become wrinkled by the rain like ordinary commercial plywood, and the contractors have found it the best lining to use for the deck forms which are exposed for a considerable time before the concrete is poured. SHUTTAPLY has no equal for really important work.

VENESTA LIMITED, VINTRY HOUSE, QUEEN STREET PLACE, LONDON, E.C.4 • CENTRAL 6580

Teak is a quiet timber, neither exotic nor flamboyant, but dignified. Where not too distracting an atmosphere is wanted, it is certainly a wood to be considered.

Its grain is usually restrained, which perhaps makes it more appropriate for the study than for the boudoir. But very attractive designs may be obtained by careful matching of veneers, both those cut from normally grained logs and those from the relatively scarce logs carrying figure. Teak's real attraction is, however, its colour, which varies from a soft golden tone to a rich brown. When both colour and grain are used skilfully, it gives a grand effect. At the same time Teak is not really an expensive wood. For practical purposes, it costs about the same as Austrian Oak, while in veneer its price compares very favourably indeed with many of the popular foreign woods.

There is another point about Teak. Once in position it stays put, and does not swell, shrink or warp or do any of the things it should not do.

From S.S. Queen of Bermuda (architects : A. McInnes Gardner & Partners). The quiet, restrained grain of Teak is well shown in the panelling, though a photograph can only suggest the shades of colour by the difference in tone.



4 CROSBY SQUARE, LONDON, E.C.3

Visit our displays at the Building Centres in London and Glasgow.

TEAK

is a decorative timber



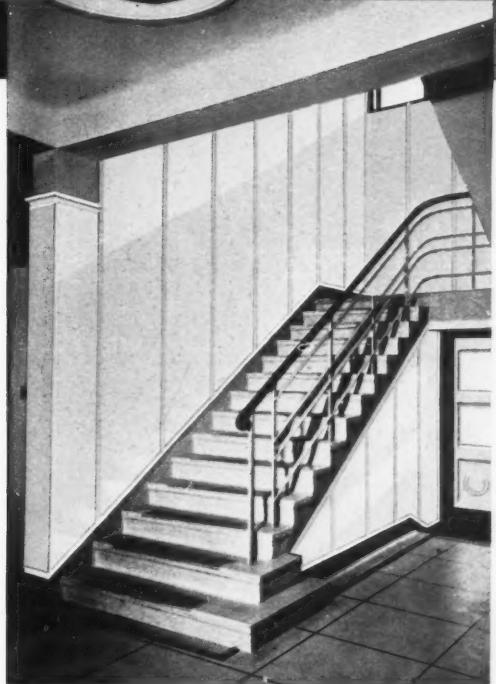
Teak—*Tectona grandis*

The chief Empire source of this timber is Burma, which supplies 85% of the imports of Teak into this country. Beware of so-called "Teaks" which are not *TECTONA GRANDIS* and therefore not Teak, and specify

BURMA TEAK

Stoneham & Kirk

TRAFFOLYTE



for PANELLING

in a wide range of colours and designs.

"Traffolyte" offers a material for new schemes of beauty—and utility—to the Architect and Builder.

The material has a hard wearing surface, is washable and retains its beauty without deterioration.

The illustrations show applications of "Bush-board" Wall Panels incorporating "Traffolyte" in the Administration block of the Team Valley Trading Estate.

Architect—W. Holford, Esq., A.R.I.B.A., M.T.P.I.

Contractor—Stephen Easten Ltd.

Booklets and pamphlets will be forwarded on request to—

METROPOLITAN-VICKERS ELECTRICAL CO. LTD.
TRAFFORD PARK - - - - MANCHESTER 17

W/P805

Flexometal Cubicles for Willenhall Baths

The photographs show some of the special collapsible Flexometal dressing cubicles supplied for the Willenhall Baths.

Altogether there were supplied :—

- 72 special collapsible cubicles
- 6 shower bath divisions
- 10 slipper bath cubicles with
- 1 lavatory cubicle.

Flexo Plywood Industries also supply Flexo flush doors of all types, veneered in timber, metal or bakelite.

Supersize veneered panels.

Full particulars on application to :—

FLEXO PLYWOOD INDUSTRIES Ltd.
(Associated with Cork Manufacturing Co.)
SOUTH CHINGFORD, LONDON, E.4
Telephone : Silverthorn 2666 (7 lines)

FLEXOMETAL

Flexometal—the metal-covered plywood faced in any sheet metal



EMPIRE TIMBER for INTERIOR DECORATION



RIPPER
WOODWORK

OVERSEAS LEAGUE (above)

Architects : Messrs. Joseph
Panelling in Indian Silver Greywood

BARKING TECHNICAL COLLEGE (centre)

Architect : J. Stuart, F.R.I.B.A.
Panelling in Australian Walnut

ROYAL EMPIRE SOCIETY (right)

Architects : Sir Herbert Baker, R.A., F.R.I.B.A.
and A. T. Scott, F.R.I.B.A.
Panelling in Canadian Cedar



RIPPERS LIMITED
CASTLE HEDINGHAM - ESSEX
BRITISH INDUSTRIES HOUSE
MARBLE ARCH - - - - W.1



BAKELITE VENEERS ON THE "MAURETANIA"



General view of the Grand Hall—all tables are surfaced with BAKELITE veneer.

BAKELITE veneers have been extensively employed in the s.s. "MAURETANIA" for the surfacing of tables, bar-counters, serving wagons, swimming bath cubicles, etc. The material is light in weight, non-brittle unaffected by moisture or alcohol and is fire-resistant. BAKELITE veneers or solid wall panels are available in a wide range of pastel shades, dark colours, wood-grain patterns, or faced with patterned fabric. Standard sizes are 100" x 50" and 84" x 36".



Cubicles attached to the Swimming Bath—partitions surfaced with BAKELITE veneer.

BAKELITE
Registered  Trade Marks
TREFOIL

BAKELITE LIMITED,
40, Grosvenor Place, London, S.W.1.

Tel. : Sloane 9911 (6 lines). Works : Birmingham (Est. 1910).

Northern Sales Office:—Manchester.

THE ARCHITECTURAL REVIEW, September 1939

H.M.V. SHOWROOMS: 363 OXFORD ST., LONDON, W.I.



PANELLING & EQUIPMENT IN VENEERED TEAK



& ASH. ARCHITECT JOSEPH EMBERTON F.R.I.B.A.

P O L L A R D S



E. POLLARD & COMPANY LTD. 159, ST. JOHN STREET, LONDON, E.C.1.
TELEPHONE: CLERKENWELL 6701. WEST END SHOWROOMS: 299, OXFORD STREET, W.1.

Acton Town Hall



Architect: W. G. CROSS, M.Inst.C.E., M.Inst. M.Cy.E.,
Borough Engineer.
Consulting Architect: ROBERT ATKINSON, F.R.I.B.A.
Contractors: PRESTIGE & CO. LTD.

Exceptionally attractive use was made of decorative woods in the panelling of the principal rooms.

Home Grown Timbers included
WAINSCOT OAK · BROWN OAK · WALNUT
WHITE AND WEATHERED SYCAMORE

Empire Timbers included
AUSTRALIAN WALNUT · BURMA TEAK
INDIAN SILVER GREYWOOD
GOLDEN PADOUK · ETC.



MAIN COMMITTEE ROOM
panelled in English Walnut



ASSEMBLY HALL
showing panelling, staging, etc. in Indian Silver Greywood.

Wm. MALLINSON & SONS LIMITED

TIMBER AND VENEER MERCHANTS AND PANEL MANUFACTURERS

130-142 HACKNEY ROAD, LONDON, E.2

Telephone: BISHOPSGATE 1234

Telegrams: "ALMONER," LONDON

**Good
WORKMANSHIP
—good WOOD**



Architects: Davies & Knight
Builders: Wm. Aldous and Sons Ltd., East Bergholt

A true craftsman takes a pride in his work, whether it be a beautiful stairease such as this or a common window frame. And Sadd's men are craftsmen. They take as much trouble over the most ordinary piece of joinery as over the best that any architect can design. There is the key to Sadd's reputation.

**JOHN SADD & SONS, LTD.
BLACKWATER MILLS**

Telephone: Maldon 131.

London Office: 108 Sentinel House, Southampton Row, W.C.1. Telephone: Holborn 9200

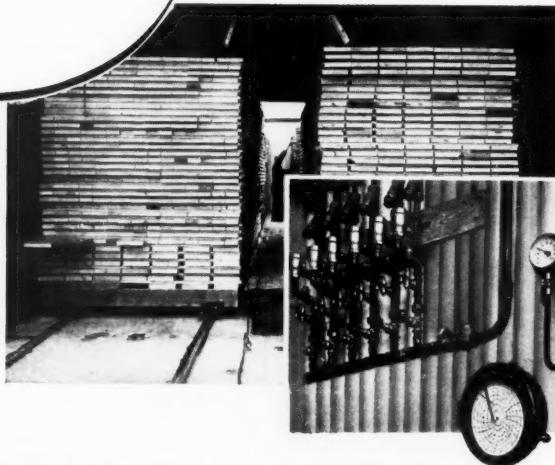
MALDON, ESSEX

Stoneham & Kirk

HIGH-PRECISION INSTRUMENTS CONTROL THE CONDITIONING OF TIMBER USED IN LEADERFLUSH DOORS

The system of kiln-drying of the timber used in LEADERFLUSH doors is the most advanced in operation anywhere in the country. Guesswork is entirely eliminated by scientific, high precision recording clocks, pyrometers and thermostats. This means that the moisture content of all timber used is completely controlled and

worked down to be in relation and harmony with a centrally heated building. There is no possibility of shrinkage or twisting in any of our products. This scientific accuracy is simply characteristic of the methods that make LEADERFLUSH "Britain's Best." Leaderflush Ltd., Stapleford Rd., Trowell, Notts. Tel.: Ilkeston 623-4.

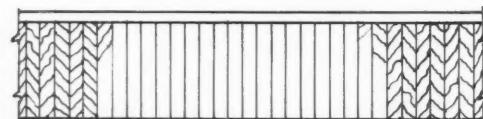


BEAUTY THAT LASTS
STRENGTH THAT ENDURES

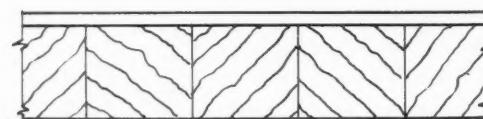
COGENT



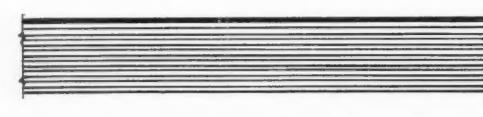
DENNY PLY. In 9 grades, 13 thicknesses, 18 different kinds of wood, and a multitude of sizes; for all general purposes.



DENNILAM. For high class veneered work, panelling, doors, etc. Sizes up to 5 ft. by 16 ft.



DENNIBLOK. Faced with Alder, Birch, Gaboon or Lime. For kitchen fittings, partitions, and flush work of all kinds. Sizes up to 6 ft. by 16 ft.



BAKELITE FACED PLYWOOD. For table tops, counter tops, fronts, and high class fittings in modern style. In black and various plain colours, including pastel shades.



PLYBESTOS. Asbestos Cement faced Plywood. For fireproof walls, partitions, doors, A.R.P. Shelters, etc.



METAL FACED PLYWOOD. For modern panelling, fire-resisting doors, coach and van bodies, partitions and shelves. Obtainable in steel, aluminium, "Staybrite," copper, and other metals.



BAKELITE WALLBOARDS. Specially made for modern panelling work in shades to conform to any colour scheme. Full particulars in literature on request.

Telephone :
Mansion House 2094

DENNY MOTT & DICKSON LTD Adelaide House
London Bridge E.C.4

**PROOF AGAINST
5,000° F !**

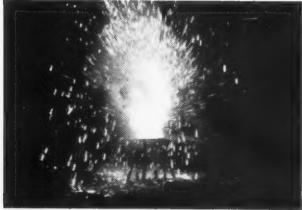
KIMOLOBOARD is the really fireproof panelling board, proved to resist temperatures up to 5,000° F. and over generated by burning thermite and magnesium incendiary bombs.

You can choose KIMOLOBOARD, confident in the knowledge that it has passed official tests and has been, and is being, extensively specified by H.M. Office of works for A.R.P. work in important Government buildings.

KIMOLOBOARD "works" like wood and is easily fixed with hammer and nails.

A.R.P. Applications.

- (a) For lining roof chambers to trap light incendiary bombs which burn out harmlessly on the board.
- (b) For partitions or panelling rooms or cupboards to protect from fire valuable or inflammable materials, records, etc.
- (c) As a false ceiling to cellars, preventing the spread of fire from above to stores or basement shelters.



We shall be glad to submit samples or sketches showing the best method of application in varying circumstances. Fully documented and illustrated records of A.R.P. tests available on request.



CELLACTITE & BRITISH URALITE LTD., Lincoln House, 296/302, High Holborn, London, W.C.1
'Phone: Chancery 5203/6 (4 lines)
'Grams: Cellactite, Holb., London

Works: Higham, Kent

Kimoloboard

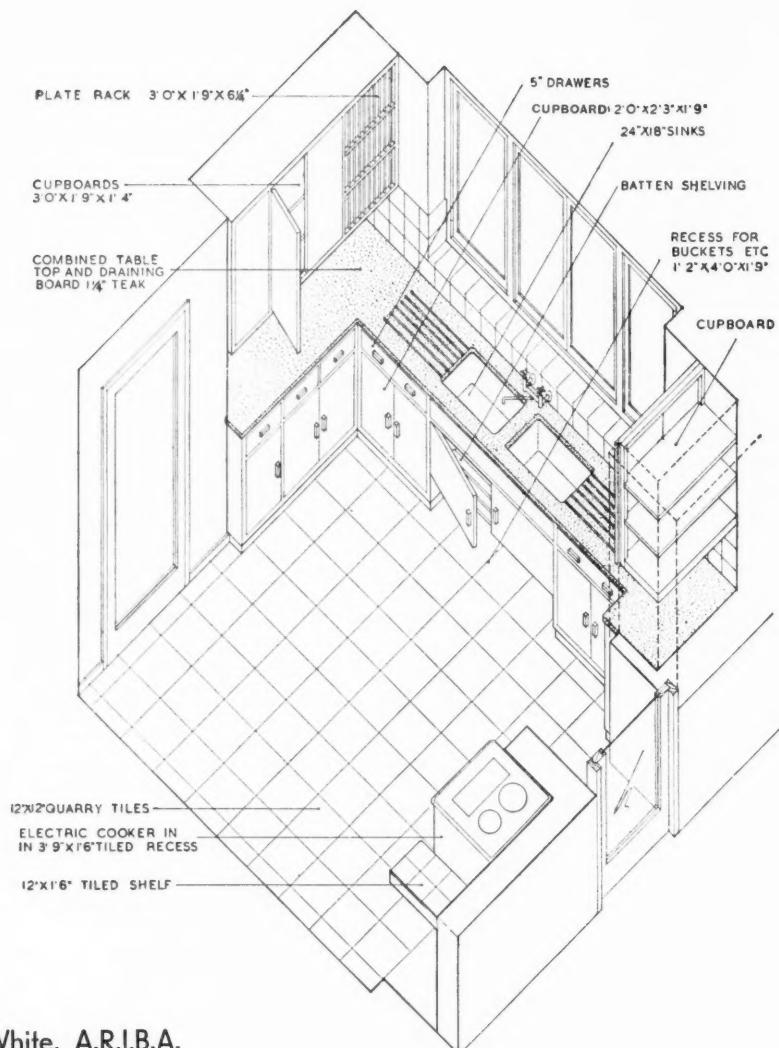
THE DIFFERENT PANELLING BOARD

A REALLY FIREPROOF COMPOUND OF ASBESTOS AND DIATOMACEOUS EARTH

TAS/Kim. 232

WORKING DETAILS

I-Domestic



Edited by

Mildred W. White, A.R.I.B.A.

The purpose of this series is to illustrate by fully dimensioned working drawings and photographs, various types of contemporary construction and built-in equipment, and to show how a large number of the new materials and finishes have been satisfactorily employed by many well-known architects. The present volume is confined to domestic work and comprises a collection of the most interesting Details in this field which have appeared in "The Architects' Journal." The subjects dealt with include Structure (Walls, Roofs, etc.), Windows, Doors, Staircases, Kitchens, Furniture (built-in and movable)—Balconies, Corridors, Loggias, Fireplaces, Bedroom Fitments, Bathrooms, etc. The book contains 144 pages, size 12 $\frac{1}{2}$ by 9 in., bound in cloth covers by the "Wiro-O" process, so that the leaves lie flat when opened. Price 10s. 6d. Postage 6d. inland.

Published by THE ARCHITECTURAL PRESS, 9 QUEEN ANNE'S GATE, LONDON, S.W.1

"INVICTUS"

(REGD.)

GAS-PROOF DOORS

TO HOME OFFICE SPECIFICATION

EXTERNAL DOORS. Construction : 2" solid Western Red Cedar, completely covered with 26 gauge galvanised steel, all edges sealed, hung with butts screwed to 2"×2"×5/16" galvanised angle iron framing and provided with self-closing handles and rubber gasket.

INTERNAL DOORS. Construction : $\frac{1}{2}$ " thick plywood, completely covered with 26 gauge galvanised steel, all edges sealed, provided with butts and latches.

PARTITIONS. (For lavatory cubicles, decontamination stations, etc.) Construction : $\frac{3}{8}$ " or $\frac{1}{2}$ " thick plywood, completely covered with 26 gauge galvanised steel, all edges sealed, provided with cleats.

"INVICTUS" METAL-FACED PLYWOOD

was specified for the decontamination and first-aid stations of the Port of London Docks, City of Coventry, Borough of Deptford, Borough of Fulham, etc., etc.

Architects, Builders and Engineers are invited to communicate for further particulars to the actual manufacturers.

BRITISH PLYWOOD MANUFACTURERS LTD.,
Telephone : BISHOPSGATE 2181 Telegrams :
362, OLD STREET, LONDON, E.C.2 INVICTPLY, FINSQUARE, LONDON

"EMCORE" A.R.P. PRODUCTS

★ METAL-FACED PLYWOOD

PLYWOOD FACED WITH GALVANISED STEEL, ALUMINIUM, COPPER, ZINC, STAINLESS STEEL, ETC.—GAS PROOF DOORS, PARTITIONS AND SHELTERS.

★ WATERPROOF-PLYWOOD

SYNTHETIC RESIN BONDED (PHENOLIC), BOILING WATER-PROOF, SALT WATERPROOF, INSECT AND FUNGUS PROOF—FOR MARINE AND OUTSIDE USE—BOAT BUILDING, CONCRETE SHUTTERS, DOORS, ETC.

★ ASBESTOS-PLYWOOD

A FIRE-RESISTING BOARD HAVING ASBESTOS FACES AND OR CORE, RESISTANT TO ALL KNOWN TYPES OF INCENDIARY BOMBS—FIREPROOF PARTITIONS, BULKHEADS, DOORS.

★ COMMERCIAL PLYWOOD

OF EVERY DESCRIPTION—SUPER SIZES UP TO 50 FT. x 10 FT. SCARF JOINTED—RUSSIAN, FINNISH AND LATVIAN BIRCH—ALDER, PINE, MAHOGANY, ETC., ETC.

METROPOLITAN PLYWOOD Co., 18-30, Leonard St., London, E.C.2

PHONE : CLERKENWELL 2133 (6 Lines)

WIRE : METROPLYKO FINSQUARE, LONDON

"IRONPLY" has immense strength

"IRONPLY" is an ingenious invention, its unique construction has created an intense interest in the Architectural World. Owing to its great strength and weight carrying propensities its use affords a considerable economical, structural and time-saving factor. It is made in 3 standard thicknesses, $\frac{3}{8}$ ", 1" and $1\frac{1}{2}$ ". It is stocked in convenient sized panels and special cut sizes can be made as required. May we send you samples and particulars?

Manufacturers
and sole distributors

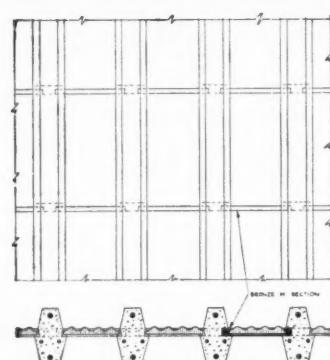
BORST & SONS
336 Euston Rd., N.W.1 and 315 Old St., E.C.1

Telephone
EUSton 1557
CLErkenwell 3571



GLAS-CRETE CONSTRUCTION

Cristol Window Construction



PLAN & ELEVATION OF CONSTRUCTION
PATENT No. 468091

LETS
DAYLIGHT IN

AT
MESSRS. F. W. WOOLWORTH'S NEW
PREMISES, MORECAMBE

This type of window consists of a series of vertical reinforced concrete mullions grooved and slotted to receive bronze H members, which in turn carry the high relief glass units. Mullions are spaced up to 2 ft. centres when glazing is carried out in sheet glass. This construction permits windows to be built to any desired height, as the weight of each glass is carried on the H members, which in turn transmit it to the mullions. This is necessary in order to avoid ultimate fracture of the lower glasses.

J. A. KING AND COMPANY LIMITED
181 QUEEN VICTORIA STREET, LONDON, E.C.4
TELEPHONE: CENTRAL 5866 (6 LINES)
TELEGRAMS: KINOVIQUE, CENT, LONDON

WATER GARDEN AT OSHAWA, ONTARIO

Awarded 1939 Bronze Medal of Royal Architectural Institute, Canada



John M. Lyle, F.R.I.B.A., R.C.A., F.R.A.I.C. Archt.

Contractors: The Gay Construction Co.

ON the main axis of the garden is a pool 161 ft. long by 21 ft. wide, leading to a larger central pool 61 ft. square. At the western end, as the central architectural feature, is placed the tea house. The pools have a water depth of 2 ft. and are constructed of reinforced concrete made impervious by the addition, to the cement, of 'PUDLO' Brand waterproofing powder. The work was done in August, 1936, and remains perfectly satisfactory despite the extremes of the Canadian climate. It required just 2,250 lbs. — approximately an English ton — of 'PUDLO' Brand waterproofer, and its cost was a very reasonable outlay to secure such a good and lasting result.

'PUDLO'

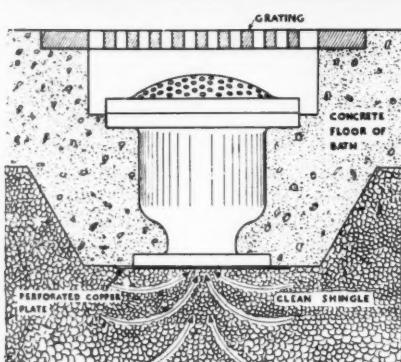
BRAND
CEMENT WATERPROOFER

KERNER-GREENWOOD & COMPANY, LIMITED
MARKET SQUARE, KING'S LYNN

Sole Proprietors and Manufacturers

RAS

The word 'PUDLO' is the Registered Trade Brand of Kerner-Greenwood & Co., Ltd., by whom all articles bearing that Brand are manufactured or guaranteed.



Typical arrangements of a Glenfield Sub-Soil Relief Valve in the concrete floor of a bath.

THE concrete floors of swimming baths are sometimes subjected to severe pressure due to the percolation of water from external sources collecting beneath the concrete and exerting a powerful upward thrust which may endanger the stability of the floor.

The Glenfield Sub-Soil Relief Valve by effecting the release of such water automatically prevents the development of such dangerous thrust without permitting the escape of water from the pond.

By courtesy of Aerial Photographs, Ltd., Glasgow, we reproduce a photograph of Prestwick Bathing Pool which is protected by Glenfield Sub-Soil Relief Valves.

We shall be glad to forward any further particulars on request.

Glenfield
GLENFIELD AND KENNEDY LIMITED KILMARNOCK

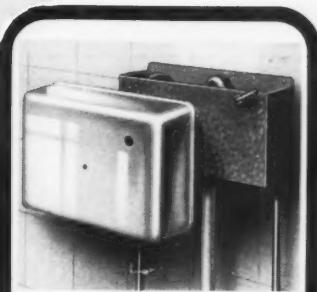


SANITARY FITTINGS are now well designed too

The new Fordham Low Level Cistern sets a high level in design.

This Panel Type Cistern saves valuable space as it only projects 6" from the wall as compared with an average 9" projection of other cisterns.

Information Sheet No. 725 gives full working details of the Fordham Panel Type Cistern and Fordham Flushing Troughs. May we send you a copy with descriptive literature?



The specially designed flushing mechanism is concealed by a vitreous enamelled outer shell which is quickly and easily fitted.

Prov. Patent No. 26754.

Fordham Panel Type CISTERN
FORDHAM PRESSINGS LIMITED • MELBOURNE WORKS • WOLVERHAMPTON



Kut Barrage from Cableway
Mast on East Bank.

ABERTHAW

PORTLAND CEMENT

Sole Sales Agents:

T. BEYNON & CO., LTD.

MERTHYR HOUSE, CARDIFF

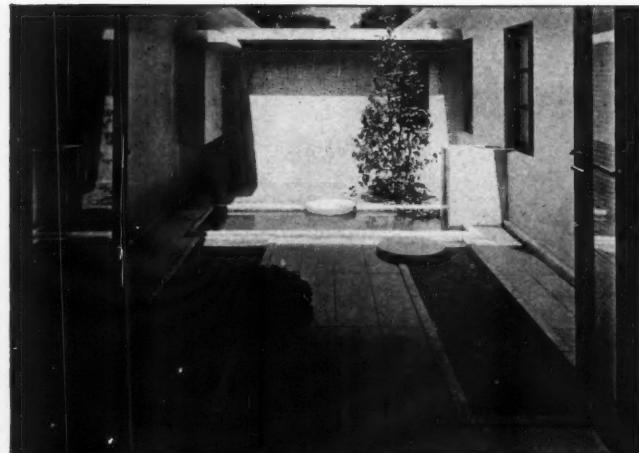
LONDON OFFICE: 3739, LIME STREET, LONDON, E.C.3

Telegrams: Beynon, Cardiff

Telephone: Cardiff 5220 (6 lines)

Gardens in the Modern Landscape

By Christopher Tunnard



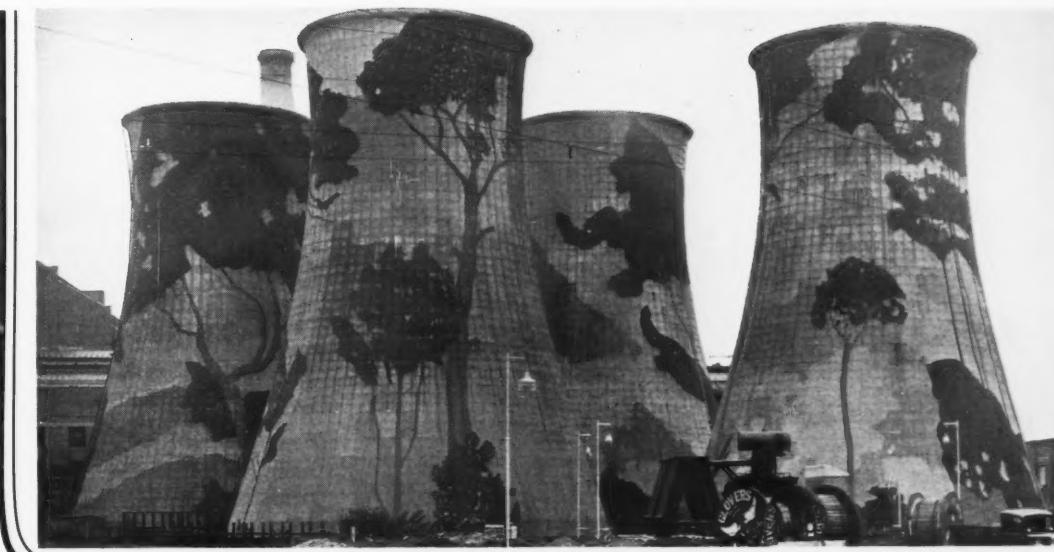
Interior Garden of a modern Japanese house

A new publication which for the first time describes methods of planning the surroundings of the modern house and flat which are in keeping with the latest developments in architecture and town planning. The author, who is himself a practising landscape architect, in an interesting historical section traces the growth of the various garden styles which are in evidence today, subsequently showing the value of a new style more in sympathy with present day needs, and finally elaborating with examples a new technique of garden planning in its relation to life and landscape. The book, part of which appeared recently in serial form in THE ARCHITECTURAL REVIEW, includes a section on planting, and is illustrated with 210 photographs, prints, drawings and plans.

Price 15s. Postage 6d.

Recently published by

THE ARCHITECTURAL PRESS, 45 The Avenue, Cheam, Surrey



CAMOUFLAGED with "STIPPOLO"

Fourteen tons of "Stippolo" Oil Bound Water Paint is the estimated amount used on these 120 feet high towers and their camouflaged appearance is causing considerable interest throughout the country.

Architects, A.R.P. Officers, Public Authorities and others interested in Camouflage painting are invited to test the weather resisting properties of "Stippolo" and to write for further particulars relating to the successful painting of large buildings such as those illustrated. Literature and prices of "Kearsley" A.R.P. products sent on request.

The illustration is by kind permission of John Mould, Esq., General Manager, City Electricity Service, Leicester. The colour scheme was designed and supervised by E. Townsend, Esq., Cathedral Studio, 31 Full Street, Derby.

ROBERT KEARSLEY & CO., RIPON, YORKS

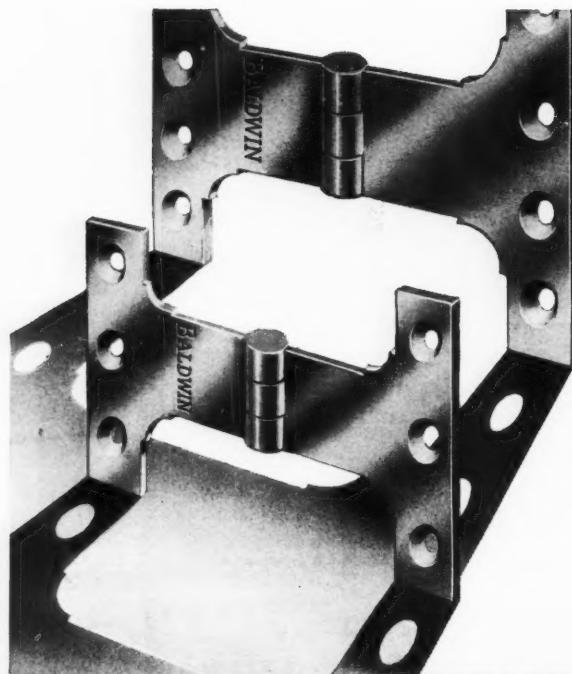


ANTIGASPHALT

THE Air Raid Precautions Department, (Home Office) has accepted "Antigasphalt" as a material which can be decontaminated satisfactorily; it can therefore be considered, from that standpoint, for use in Air Raid Precautions construction.

FOR PARTICULARS APPLY

THE LIMMER & TRINIDAD LAKE ASPHALT CO. LTD.
BERRY HILL, TAPLOW, BUCKS. Telephone: Maidenhead 2222.



Quietly efficient and unobtrusive, giving maximum service with the minimum of friction. Fitted, as other Baldwin Cast Butt Hinges, with the famous enclosed steel pin and polished joints.

Obtainable at Builders' Merchants and Ironmongers.

Baldwin, Son & Co. Ltd., Stourport-on-Severn.

BALDWIN'S

**CAST IRON BUTTS
AND HINGES**

The Perfect Modern Boiler House

at the

**QUEEN MARY
COLLEGE · LONDON**

Four "GRAVICO" Boilers comprise the equipment for Central Warming and Hot Water Service. This is typical of the many installations we have completed for important buildings throughout the country.

"GRAVICO" Boilers have been chosen for their automatic control of temperature, economical burning of coke, cleanliness, quietness of operation, flexibility of control and space saving.

Let us send you our attractive new "GRAVICO" Brochure which gives much useful information and many illustrations of these Boilers in operation.

GRAVICO
GRAVITY-FEED COKE STORAGE
AUTOMATIC NATURAL DRAUGHT
BOILER



HARTLEY & SUGDEN LTD.
WHITE ROSE BOILER WORKS, HALIFAX, ENG.
LONDON OFFICE: 357, EUSTON ROAD, N.W.1.
Also at BIRMINGHAM BRISTOL GLASGOW MANCHESTER SHEFFIELD.



By Appointment
to the late KING GEORGE V.

ARCHITECTURAL
METALWORK
WOODWORK
STAINED GLASS

BROMSGROVE GUILD LTD.
Bromsgrove, Worcestershire

LONDON · 199, Piccadilly, W.1

MANCHESTER · 76, Victoria Street



Recently constructed premises for Messrs. KINGHAM'S, Northampton.
Facade in Croft Adamant Reconstructed Clipsham Stone.
Architects: Messrs. Law, Harris & Croft, Northampton.

CROFT GRANITE, BRICK, & CONCRETE CO. LTD.
CROFT, Near LEICESTER.
London Office: 15 Victoria Street, London, S.W.1

For The
Modern Building

Croft Adamant Reconstructed Stone is indistinguishable from the natural and is of great strength and durability—most suitable for the modern building.

Croft Adamant Reconstructed Marble and Terrazzo are made in a wide variety of beautiful colourings excellent materials for modern interior decoration.

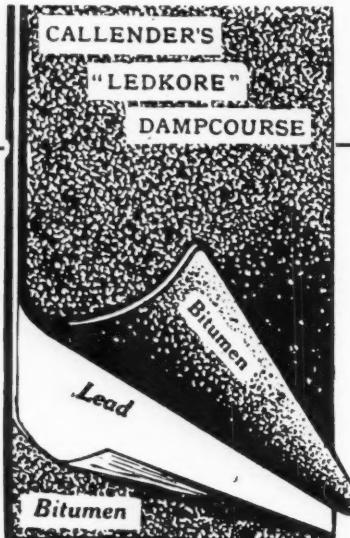
Architects are invited to write for samples and information to Dept. A.3.

**CROFT
ADAMANT**
RECONSTRUCTED STONE
MARBLE AND TERRAZZO

PRE-CAST UNITS FOR AIR-RAID TRENCHES

ALWAYS SPECIFY
**CROFT
ADAMANT**

CALLENDER'S "LIBRA" "LEDKORE" LEAD AND BITUMEN DAMPCOURSE



DEPT. R.A. FOR FULL PARTICULARS

"LIBRA" has a core of Sheet Lead weighing 1 LB. PER SQUARE FOOT. Bitumen covering both sides.

No Coal Tar or Pitch.

In Standard Rolls of 24 feet in all usual wall widths.

Designed specially to meet the wish of Architects desiring heaviest lead inset.

Still cheaper than slates and cement because cost of laying practically nil.

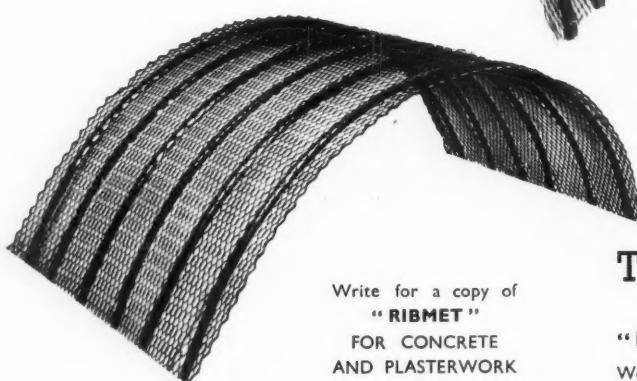
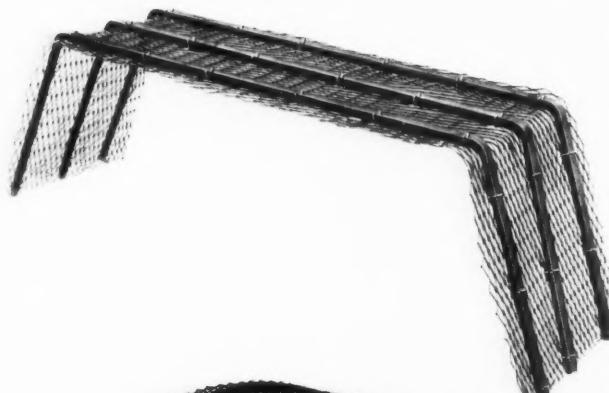
Telephone: Abbey 5548 9

"Ledkore" was specified for the Dampcourse at Liverpool Philharmonic Hall. Architect: H. J. Rowse, F.R.I.B.A. (Illustrated in this issue.)

GEORGE M. CALLENDER & CO., LTD., 25 Victoria Street, London, S.W.1

THE ONLY MATERIAL

of its kind



Write for a copy of
"RIBMET"
FOR CONCRETE
AND PLASTERWORK

"Ribmet"
(REGD.)

"Z" TYPE FOR PLASTERWORK

"X" TYPE FOR CONCRETE WORK

The Expanded Metal Co. Ltd.

Patentees and Manufacturers of Expanded Metal.

Engineers for all forms of Reinforced Concrete and Fire-resistant Construction.

"Dunedin," Underwood Road, Caterham, Surrey
(Temporary Address)

Works: West Hartlepool

Established over 45 years

BI

CABLES



IN FYVIE CASTLE

**BRITISH INSULATED
CABLES LTD.**

PREScot — LANCS.

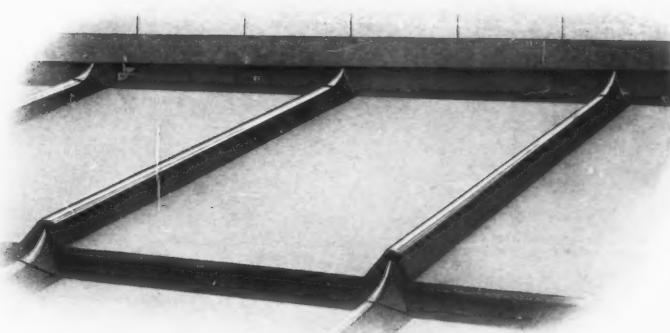
TEL. NO.: PREScot 6871.

At Fyvie, near Turriff, Aberdeenshire, stands the fine building shown in the illustration, Fyvie Castle.

In the electrical wiring, which was carried out by THE ABERDEEN ELECTRICAL ENGINEERING CO. LTD.
Registered Installation Contractors
17 Belmont Street
ABERDEEN,

B.I. Cables have been used throughout

BRABY



COPPER ROOFING

GUARANTEED WATERTIGHT

Estimates Submitted for Work
in Town or Country. To ensure
best results for flat roofs,
copper should be laid on
BRABY'S Conical Roll System

FREDK. BRABY & Co. LTD., 352-364 EUSTON ROAD, LONDON, N.W.1

And at Deptford, Liverpool, Bristol, Plymouth, Glasgow, Falkirk, Motherwell, Belfast and Dublin

*Where SILENCE
IS AT A PREMIUM!*

*It's in your interest
TO FIT
VO-LA-FELT
CARPET UNDERLAY*

In a world where the biggest noise gets the most attention, silence is a thing which is much sought after but seldom found. VO-LA-FELT carpet underlay, fitted in every room, will achieve this enviable state, as well as giving carpets a longer life and a feel of luxury that does not belong to them! Hygienic, moth proof and dust proof, VO-LA-FELT will not creep, slip or spread on polished surfaces.

Write for descriptive leaflet

The carpet's closest friend
Reg. No. 53928

VO-LA-FELT
CARPET UNDERLAY

VOL-CREPE LIMITED • GLOSSOP • DERBYSHIRE

WARMING
HOT WATER SUPPLIES
VENTILATION
COKE OR OIL FIRED BOILERS
• AUTOMATIC STOKERS •

CHAS. P. **KINNELL** & CO., LTD.

65, 65A, SOUTHWARK STREET, LONDON, S.E.1
Phone WATERLOO 4144
Telegrams "Kinnell-phone, London"

**THE
MODERN HOUSE**

By F. R. S. YORKE, A.R.I.B.A.

The book includes a selection of the most successful examples of advanced house design from the leaders of the movement. Containing more than 200 pages, $7\frac{1}{2} \times 10$, illustrated by more than 500 photographs, plans and constructional details, of houses from all over the world, it outlines the requirements of the new type of home and discusses plan, wall, window and roof. The third and enlarged edition includes an additional number of English examples. Price 21s. Postage 6d.

THE ARCHITECTURAL PRESS
45 THE AVENUE, CHEAM, SURREY

BEAUTY
takes many forms

May be found in:
 "OLIVETTE" ENAMEL PAINT (Interior & Exterior Grades)
 "OLIVETTE" FLAT & SATIN SHEEN
 "VELASCO" OIL
 "OLIVETTE" TEMPER
 "FLAXONE" STAIN (no Knotting required)
 "FLAXONE" FINISHES Flat and Gloss
 Sole Manufacturers: W. & J. LEIGH LTD
Nottingham & London

OLIVETTE

MINTON

TILES

FOR WALLS & FLOORS

MINTON HOLLINS LTD, PATENT TILE WORKS, STOKE ON TRENT.

The "At a Glance" Series

English Architecture at a Glance

A simple review in pictures of the Chief Periods of English Architecture. 1s. 6d. net. Postage 2d.

English Furniture at a Glance

By CHARLES H. HAYWARD. Sixteenth to Eighteenth Centuries. 3s. 6d. net. Postage 3d.

English Rooms and their Decoration at a Glance

By CHARLES H. HAYWARD. Vol. I, 1066-1620; Vol. II, 1620-1800. 3s. 6d. net. Postage 3d.

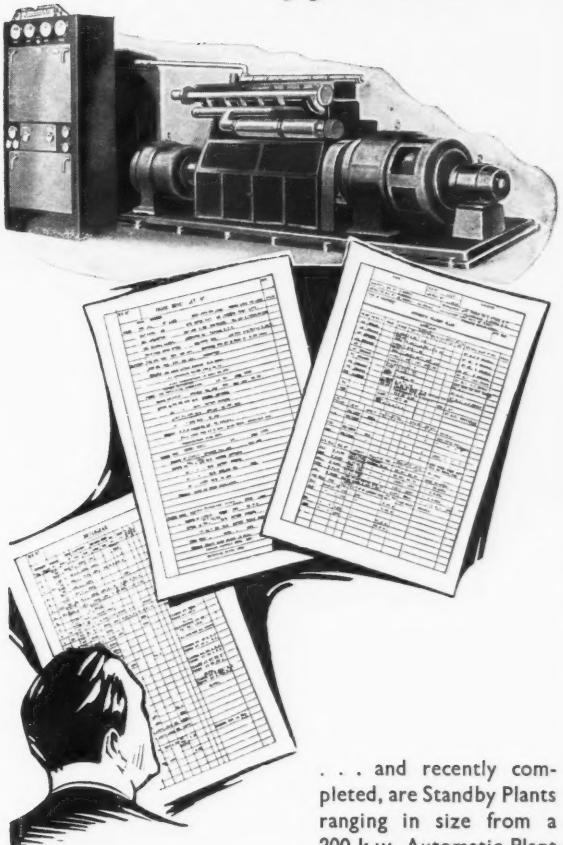
Sailing Ships at a Glance

By EDWARD W. HOBBS, A.R.N.A. From the earliest times until today. 3s. 6d. Postage 4d.

THE ARCHITECTURAL PRESS LTD.

45 THE AVENUE, CHEAM, SURREY

... off Test —



. . . and recently completed, are Standby Plants ranging in size from a 200 k.w. Automatic Plant for a large Municipal Power Station to a 2½ k.w. Plant for an A.R.P. Shelter. Whatever its size or purpose, the same stringent test conditions are applied to every

Austinlite
AUTOMATIC
STANDBY
PLANT

AUSTINLITE LTD
Proprietors: CHANCE BROTHERS and CO., LIMITED.
LIGHTHOUSE WORKS, SMETHWICK

what
more
can you
ask of a
pencil ?



That it is available in a range of degrees to meet all needs—each degree being always strictly accurate. That the lead is smooth, strong and durable, and makes a line even and dense enough to give perfect reproduction without special treatment.

These are the qualities of the Venus lead, made by the exclusive patented colloidal process. That is why they are the largest selling quality pencils in the world.

If you have any difficulty in being supplied, write direct to the address below for sample, stating which degree you prefer.

VENUS
PENCILS

VENUS PENCIL CO. LTD.,
CLAPTON, LONDON, E.5

SEVENTEEN SHADES OF BLACK TO CHOOSE FROM:—



IMPORTANT ANNOUNCEMENT

BY

THE RUBEROID CO. LTD.

We wish to state that we have made no increase in the prices of our well-known brands of RUBEROID, ASTOS, STAREX and PLUVEX ROOFINGS, ZYLEX SLATERS' FELTS and DAMPCOURSES, and that the prices of all our products remain as listed in our Price List published in March 1939.

It will be the policy of the Company to continue to sell their products at the lowest possible prices.

THE RUBEROID CO. LTD.,
LINCOLN HOUSE, 296/302, HIGH HOLBORN,
LONDON, W.C.1.

*The paint with the High Gloss
that endures—*

TRADE **CHAMPION'S** MARK

WHITE-LEAD-BASE High Gloss Paint “W.L.B.”

Possesses all the advantages of White Lead with its wonderful protective quality plus the smooth high-gloss finish usually associated only with the best Hard Gloss Paints. The range of 26 colours is carefully selected to cover the needs of all modern decorative purposes.

It's the Base
that makes the
PAINT endure

Architects are invited to write for particulars to:
CHAMPION, DRUCE & CO., LTD.

(Established over 160 years).

Makers of Paints, Colours, Enamels and Varnishes.
425, Caledonian Road, London, N.7.

Sole Manufacturers of: CHAMPION'S Genuine English Stack-Corroded WHITE LEAD; CHAMPION'S Genuine White Lead PAINT; CHAMPION'S LEAD PAINT IN COLOURS.

PRODORITE

ACID-PROOFING WORK OF ALL DESCRIPTIONS

INDUSTRIAL FLOORING—ACID-
PROOF—NON-DUSTING—NON-SLIP
—LAID IN SITU—MACHINE FACED
TILES FOR DECORATIVE SCHEMES

SUPPLIERS TO ADMIRALTY, WAR OFFICE
AND AIR MINISTRY

Work laid and guaranteed by our own Contracts
Department or Materials supplied with Service

PRODORITE LTD, EAGLE WORKS, WEDNESBURY, STAFFS.

Inexpensive fabrics
for the modern
flat

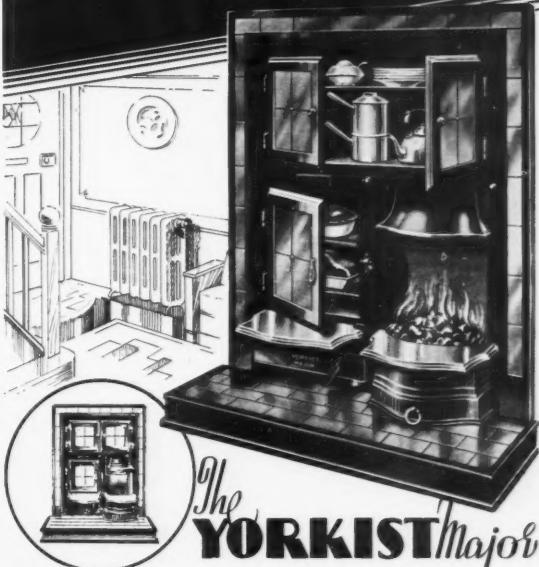


HELIOS LTD

59 BERNERS STREET
LONDON Tel. MUS.7257

HEAD OFFICE & MILLS
BOLTON TEL. 15

*The appeal of Beauty in
Permanent Lexos porcelain*



YORKIST Major

WILSONS &
MATHIESONS LTD.
ARMLEY, LEEDS

Famous for its perfect Cooking, Warmth, and ample Hot Water Supply.
CATALOGUE SENT ON REQUEST

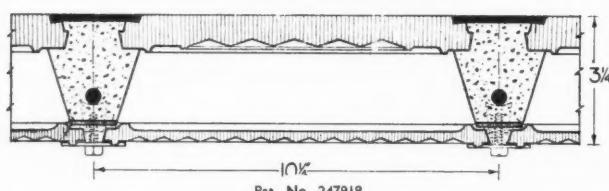


Southfields Library

Architects :
Symington, Prince & Pike

GLAS-CRETE CONSTRUCTION

DOUBLE GLAZING



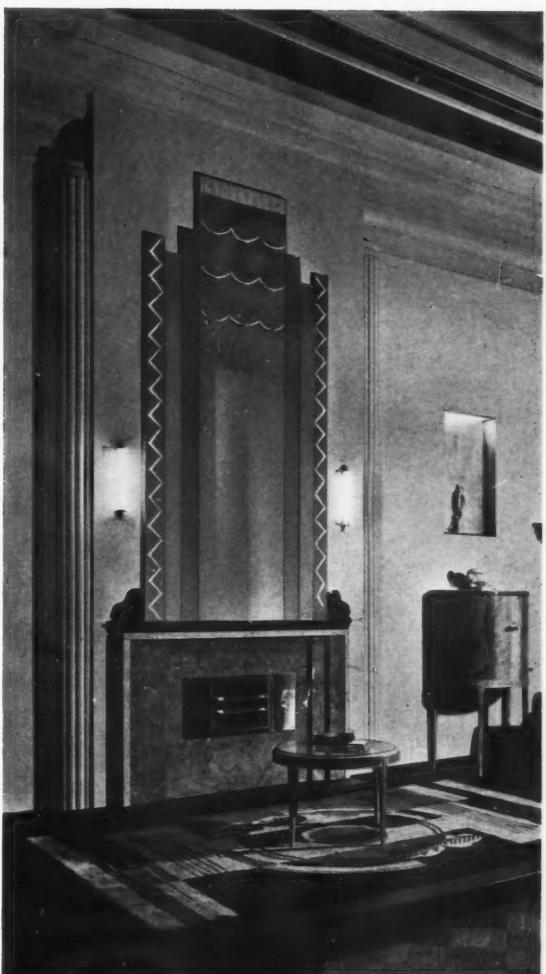
Type 34 Double Glazed Construction forms a roof light and lantern light combined, insulating against sound, temperature changes and eliminating condensation. At night a brilliant appearance is produced by the modelling on the soffit glasses reflecting the internal illumination. Patent Construction with special Asphalt Finish between the lenses entirely eliminates any possibility of leakage through hair cracks.

"Glas-Crete" Roof and Lantern Lights are so designed that although admitting the maximum of light, can be loaded with sandbags as a protection against incendiary bombs, splinters and blast.

As the glass area is divided into a number of small squares (approx. 1-in thick) which are supported on reinforced concrete ribs, any damage done is localized.

J. A. KING AND COMPANY LIMITED
181 QUEEN VICTORIA STREET, LONDON, E.C.4
Telephone: CENTRAL 5866 (6 lines)
Branches: BRISTOL • LEEDS • SHEFFIELD • GLASGOW
Telegrams: KINOVIQUE, CENT, LONDON

WHAT MAKES
GOOD
DECORATION & DESIGN
LOOK
BETTER ?



A modern fireplace

O. P. Milne, F.R.I.B.A.

GLASS
OF COURSE,
BUT
IT
MUST
BE
GLASS

BY

pugh
BROS LTD.
Craftsmen in Glass
Compton St. London E.C.I
Clerkenwell 3211

parts, but then I always send my plans out! At all events, I thoroughly enjoyed the photograph of an arc flame under magnetic influence.

The British Rubber Publicity Association

19, Fenchurch Street, E.C.3.

The international scheme for the regulation of rubber envisaged the formation of an organization in Great Britain to conduct research into finding new uses for rubber and propaganda for its existing applications. The British Rubber Publicity Association announces that it has taken over the activities formerly carried out by the Rubber Growers' Association over a long period of years.

As is usual with trade associations, it has itself no manufacturing or trading facilities but exists to promote the interests of the industry and to give help to users of rubber.

The Association is taking the very sensible course of appointing an architect as consultant to deal with problems connected with the building industry. His services will be freely available to all architects.

I am strongly in favour of these Associations, which, as far as my own experience goes, have proved to be most

helpful both in the case of giving individual advice and in the wider field of general research.

To quote two typical cases of the work done by such Associations:

The British Steelwork Association has just opened a new showroom designed by Cameron Kirby at Steel House, Tothill Street, S.W.1. At present an Exhibition of the various types of steel A.R.P. shelters is being held and technical information and assistance is available.

I have also received from Clay Products Technical Bureau of Great Britain two practical and useful brochures—Bulletin No. A.R.P. 2 on Brick Shelters, containing a number of typical plans with full details of costs; and Bulletin No. S.G. 2 on Sewage and Drainage, a dull subject but one on which most of us could do with a little more information.

My friend Brian Grant, who has delegated to me this month the duty of writing these notes, is very fond of throwing bricks at manufacturers for sending out uninformative pieces of sales blah. I am beginning to wonder if his perpetual grumbling is beginning to take effect. At all events, most of the booklets that have dropped into my letterbox during the last few weeks have at the worst been worth looking at and some of them I am keeping, though knowing my system of filing I am inclined to doubt whether I shall succeed in finding them again if I want them.

Lighting Fittings

Messrs. Best & Lloyd, Ltd. (Handsworth, Birmingham), have sent me particulars of some pleasant additions to their range of lighting fittings. I liked best some pendants designed by Eric Paton. The illustrations show the three types available. Prices vary from £3 14s. to £4 7s., according to size and finish.

The same firm also send me details of a new telescopic reflector designed to prevent the direct rays from electric lamps throwing illumination on to the windows of a room.

The shade is made of spun aluminium finished in black or ivory outside with the internal face of the telescopic sections in black and the dispersive reflector in white.

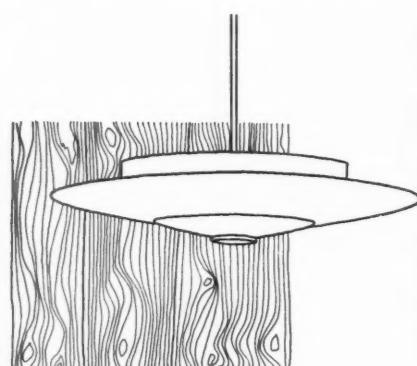
To lower the reflector the telescopic section in the top cap is turned until projections on the top cap pass through slots in the telescopic section.

Various sizes are standardized in accordance with the dimensions given in the accompanying table. Prices vary

No.	Watts	Dimensions in Inches		
		A	B	C
A.R.P. 1	.. 60	8½	6½	10½
A.R.P. 2	.. 100	10	7¼	12¼
A.R.P. 3	.. 150	10	8	13
A.R.P. 4	.. 200	12	9¾	15½

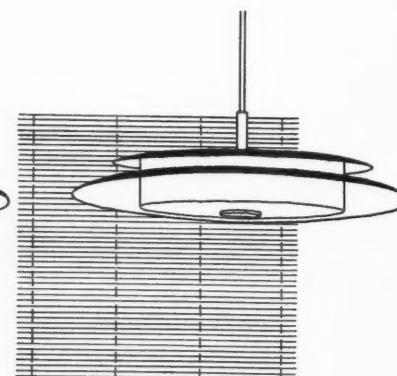
from 10s. 6d. upwards, and special quotations are made for quantities.

Particulars may be obtained from the company's head office at Handsworth, Birmingham, or from their London office, 40 Great Marlborough Street, London, W.1.



Pressed Steel

For instance, the Morris Singer Company (Ferry Lane Works, Forest Road, E. 17) have produced a booklet on their pressed steel door frames. The advantages of steel frames are by now well known and no space is wasted on elaborating them. Instead, an adequate number of full size details is given showing the range of sections to suit different door or wall thicknesses. Then follow brief fixing instructions and the method of specification. No wasted words, but quite a lot of helpful information.



New lighting fittings from Best and Lloyd

Development Associations

All the Development Associations are, according to present information, continuing to operate but the nature of their work will almost certainly be adjusted to meet present conditions and requirements. The information bureaux of the various Associations will perform a national service and I understand that already their inquiries departments are working at high pressure.

The Zinc Development Association and the Cement and Concrete Association have moved their headquarters to Oxford and there are proposals that all the Development Associations should be centred there.

Definite information should be

Inspiration
without rein - in
ALUMINIUM



Decorative casting in aluminium alloy.

ALUMINIUM enables thought to be given form for Architectural purposes unhampered by Technical limitations. Both the pure metal and alloys specially developed for architectural purposes are available in a wide variety of cast or wrought forms. Light in weight, and free from coloured washings, the metal lends itself to all the traditional finishes and in addition anodic treatment may be used to combine protection with unique decorative effects.

British Aluminium

HEAD OFFICE:

NORFOLK HOUSE, ST. JAMES'S SQUARE, LONDON, S.W.1

CO. LTD.

TEMPORARY HEAD OFFICE: RAVEN HOTEL, CASTLE STREET, SHREWSBURY

Telephone: Shrewsbury 4451.

Telegrams: "Cryolite, Shrewsbury"

95.A.R.10.39

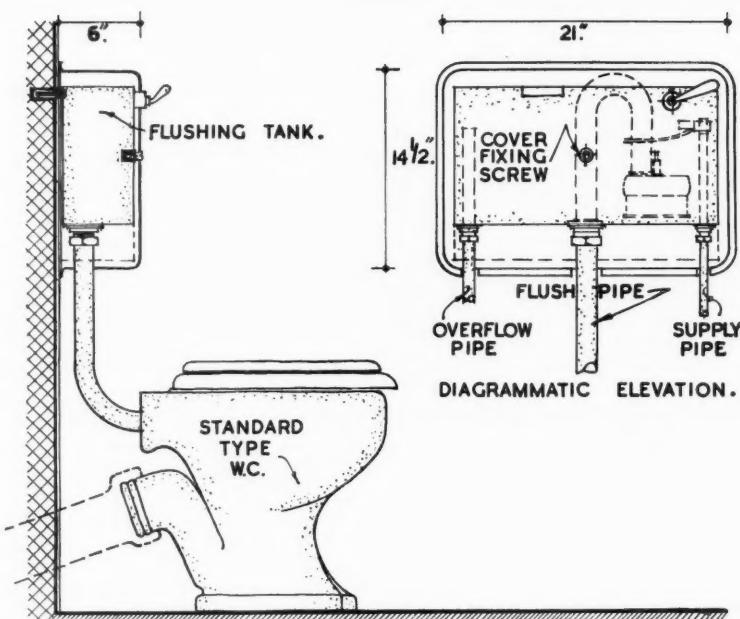
TRADE AND CRAFT

available quite shortly and those wishing to make inquiries are invited to telephone the Architectural Press at Vigilant 5762.

A New Low Level Cistern

The illustration on this page shows the low level flushing cistern recently introduced by Messrs. Fordham Pressings, Ltd., Melbourne Works, Dudley Road, Wolverhampton. Its clean simple lines earn full marks. In construction it consists of two parts, the inner cistern of welded steel and the outer panel cover of seamless steel, vitreous enamelled in any specified colour. Two, two and a half and three gallon capacities are standardized, the prices being 60s., 61s. 6d. and 63s. The projection from the wall is only 6", which is handy in these days of minimum planning. Fixing is by means of two holes in the back of the inner unit, the outer covering being slipped on afterwards and secured by a single screw with a slot wide enough to be turned by a coin if inspection of the working parts is desired.

The same firm also produces a range of high level Flushing Troughs. Individual sections run up to a maximum length of 8', but further sections can readily be added to suit large installations. Full details of both types can be found on Information Sheet No. 725 (Architects' Journal Library of Planned Information).



The British Aluminium Co. Ltd. have removed their Head Office to the Raven Hotel, Castle Street, Shrewsbury, Salop. Telephone: Shrewsbury 4451. Telegrams: "Cryolite, Shrewsbury." All of the Company's branch office addresses remain unchanged. National requirements have first call upon the resources of the Company; in connection with these and

other requirements, the Company hold their Technical Staff and Representatives at the service of Industry.

Building Industries Services are still in London but have moved from Ebury Street to Holborn. Telephone No.: Holborn 7666.

LINE

WALLPAPERS & PAINTS

**JOHN LINE
& SONS LTD**

Makers of the "Studies in Harmony" Wallpapers & Paints
213-216, TOTTENHAM COURT ROAD, LONDON, W1
Telephone: MUSEUM 3300 (26 lines)

**Special attention given
to Architects' enquiries**

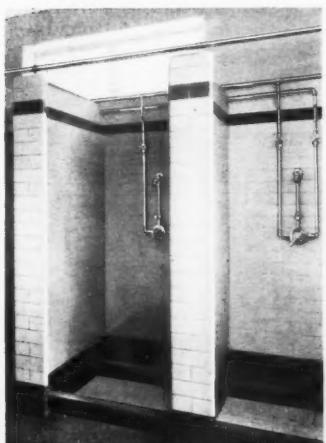
HAND-PRINTED WALLPAPERS TO ARCHITECTS' OWN COLOURINGS



Specify *Leonard-Thermostatic* water mixing valves for washing equipment



Range of wash basins in the Gents' Toilet.
Grosvenor Hotel, Manchester.



Courtesy of Leicester County Council.
Single Showers. Loughborough Technical
College.



Courtesy of Messrs. Spiller's Ltd., Cardiff
Mills.
Wash Fountains supplied from two Leonard
Valves.

If you are putting in washing equipment you can save money and get better results by specifying Leonard-Thermostatic water mixing valves instead of ordinary mixing valves.

The Leonard-Thermostatic Valve holds the temperature steady, so that when the workpeople rush to wash, all they have to do is to turn on the water and out comes blended water at just the right temperature. If they make the blend for themselves, there is bound to be waste. Even when they have at last got the temperature to suit them, if somebody opens another valve elsewhere in the system, down goes the pressure and away goes the blend. Then it has to be fixed all over again, and the owner will be fortunate if the equipment doesn't get damaged when a score of impatient men are held up.

HOLDS THE TEMPERATURE STEADY

With a Leonard-Thermostatic mixing valve all that is altered. You set the temperature of the water at the point at which you think it should be, and lock it. The valve will keep it there. Whatever variation of pressure or temperature occurs in the supply, the valve will deliver water only at the temperature for which it is set.

Leonard-Thermostatic Valves save water, save heat, save risk of scalding. In a busy works a Leonard-Thermostatic Valve will save its cost in a few weeks. The use of the Leonard thermostat obviates the need of cold water storage altogether.

Leonard Valves are coming into use more widely every day. In factories and schools for showers, ranges of hand-basins and washing troughs, circular fountains.

In Hospitals for showers, infants' and children's baths, continuous treatment baths, surgeons' hand-basins, X-Ray film washing tanks, dental sprays.

In Public Baths for pre-cleansing showers and foot-sprays, shampoo and massage sprays, and douches in Turkish Baths: in military and naval establishments, police stations, prisons, A.R.P. cleansing stations, first aid posts and other emergency jobs.

Leonard-Thermostatic Valves have been specified by more than a hundred leading architects. They have been adopted as standard equipment by thirty County Councils and two hundred Municipalities.

Send for illustrated pamphlet from manufacturers



Courtesy of City of Birmingham Education Dept. Basins in Dental Clinic, Aldridge Road Schools, Queslett. Consulting Engineers: Henry Lea & Son.



Shower Room at the Sports Pavilion at Reading University.
Architects Charles Smith and Son, Reading.



General Hospital, Cheltenham.
Surgeons' Wash Basin with elbow controlled outlet stop cock.

WALKER, CROSWELLER & CO. LTD.

WHADDON WORKS, CHELTENHAM, GLOS.

LONDON OFFICE: 6 GORDON SQUARE W.C.1.

PHONE: MUS. 3107

© 61-44



TRADE AND CRAFT

**The Buildings
Illustrated**

New Nurses' Home, Macclesfield.

*Architect : Frederick Gibberd,
L.R.I.B.A., A.I.A.A.*

The general contractors were Cooper Bros. Among the sub-contractors and craftsmen were the following:—Caxton Floors, Ltd. (reinforced concrete work); John Bolding and Sons, Ltd. (sanitary equipment); E. Hill Aldam and Co., Ltd. (sliding door gear); Cork Insulation Co., Ltd. (cork floors); William Ryder, Ltd. (bathroom equipment); MacAndrews & Forbes, Ltd. (doors); R. I. W. Protective Products, Ltd. (waterproof painting); Garton and Thorne, Ltd. (staircase balustrades); William Sugg and Co., Ltd. (gas incinerator); Frederick Braby and Co., Ltd. (cloak room fittings); Holophane, Ltd. (flush ceiling lighting fittings); Paul and Moore, Ltd. (ironmongery); Ragusa Asphalt Paving Co., Ltd. (asphalt roofing); Williams & Williams, Ltd. (metal windows); Morris Warming Co., Ltd. (heating installation); British Trane Co., Ltd. (Vectair radiators); T. and R. Williamson, Ltd. (paint and distemper); Joseph Freeman, Sons &

Co., Ltd. (concrete paint); Tentest Fibre Board, Co., Ltd. (insulating board).

House at Hampstead.

*Architects : Samuel & Harding,
A.A.R.I.B.A.*

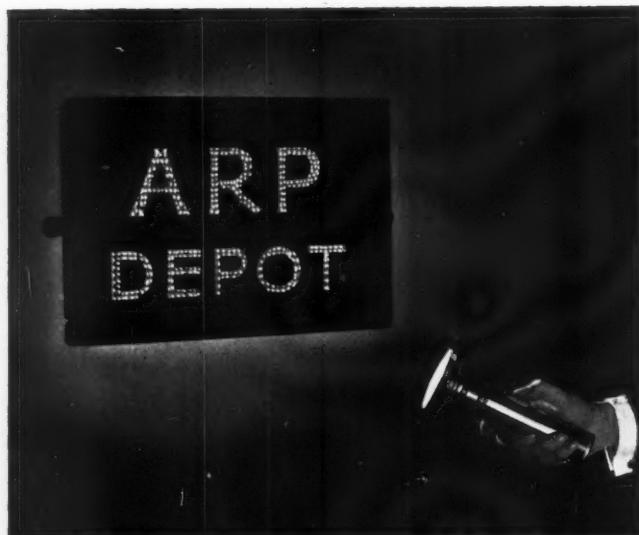
The general contractors were F. J. Moreton and Son, Ltd. Among the sub-contractors and craftsmen were the following:—Helical Bar & Engineering Co., Ltd. (reinforced concrete); Acerington Brick and Tile Co., Ltd. (bricks); Industrial & Domestic Heaters, Ltd. (central heating); Bratt Colspan, Ltd. (grates); Duncan Watson, Ltd. (electric wiring, bells); Merchant Adventurers of London, Ltd., Oswald Hollmann, Ltd., Troughton & Young, Ltd. (electric light fixtures); George Jennings, Ltd. (sanitary fittings); J. D. Beardmore and Co., Ltd., Dryad Metal Works, Ltd. (door furniture, window furniture); Rowe Bros., Ltd. (casements); D. W. Price and Co. (glass bricks); Shutter Contractors, Ltd. (rolling shutters); Veneers (Anglo-European), Ltd. (Donovan flush doors); Austin Compton Roberts, G. A. Harvey and Co., Ltd. (metalwork); Cork Insulation Co., Ltd. (cork floors); Cellulin Flooring Co., Ltd. (lino).

Kingsbury Swimming Pool.

*Borough Engineer and Surveyor :
Cecil S. Trapp.*

The general contractors were Commercial Structures, Ltd. Among the subcontractors and craftsmen were the following:—Empire Stone Co., Ltd. (artificial stone, including cascades); Davey & United Engineering Co., Ltd. (heating installation); The Permitit Co., Ltd. (filtration and sterilization plants); The British Thomson-Houston (underwater floodlighting); Davis Contractors, Ltd. (hollow tile roofs and floors); Girlings Terra Concrete Co., Ltd. (artificial stone paving); Adamsez, Ltd. (sanitary equipment); Shaws Glazed Brick Co., Ltd. (glazed bricks, scum trough and coping); The Potter Rax Gate Co., Ltd. (wire baskets); Art Pavements and Decorations (terrazzo); The Composition Linolite Flooring Co., Ltd. (composition floors); John Ellis and Sons, Ltd. (Emalux surfaces); Drytone Joinery, Ltd. (teak doors and walnut panelings); Crittall Manufacturing Co., Ltd. (steel casements and folding steel doors); Highways Construction, Ltd. (asphalt work); Troughton and Young, Ltd. (electrical fittings); Charles Wicksteed and Co., Ltd. (diving equipment); British Art Tile Co., Ltd. (tile surround to pool); Le Grand Sutcliffe & Gell, Ltd. (turnstiles); Mellowes & Co., Ltd. (patent glazing to

**Direction signs in connection with PUBLIC BUILDINGS,
FLATS, RAILWAY STATIONS
and A.R.P. SHELTERS**



**THE LONDON SAND BLAST
DECORATIVE GLASS WORKS LTD.
SEAGER PLACE, E.3.**

Telephone : ADVANCE 1074

Catchlite Reflecting Signs
that answer to the
ELECTRIC TORCH

EFFICIENT by the brilliant reflection of varied focus that is collected from the faintest glimmer of light.

ECONOMIC by obtaining superior reflection than an expensive series of polished lenses, at a fraction of the cost.

DURABLE because the silverying is copper backed, the frames all watertight backed, and the glass can be supplied armoured.



The Works at which G.E.C. Steel Conduit and Fittings are made are the largest and most important in Great Britain engaged in the production of all classes and types of Electrical Conduits and Fittings.

Rigorous inspection tests, carried out at each stage from the raw material upwards, ensure G.E.C. Steel Conduit and Fittings of absolute reliability and of the highest possible quality, and conform to all the requirements set out in B.S.S. No. 31, 1933.

*For a really reliable installation
SPECIFY—*

**G.E.C.
CONDUIT**
and Conduit Fittings



Advt. of The General Electric Co., Ltd., Magnet House, Kingsway, London, W.C.2.

TRADE AND CRAFT

café canopy); J. A. King and Co., Ltd. (roof lights and blocks); D. Sebel and Co., Ltd. (ornamental railing); Gas Light and Coke Co. (gas heaters, cooker, etc.); Light Steelwork (1925), Ltd. (car park attendant's shelter); Parker, Winder and Achurch, Ltd. (ironmongery); Wettern Bros., Ltd. (concrete channels and kerbing); Sound Sales, Ltd. (sound and inter-phone equipment); Ryarsh Brick and Sand, Ltd. (sand and lime bricks); Kingfisher, Ltd. (café chairs); W. Lusty and Sons, Ltd. (café tables); Wm. Wood and Son, Ltd. (seats); Thomas Foster and Sons, Ltd. (non-slip treads); O'Brien, Thomas and Co., Ltd. (fireplaces); R. C. Cutting & Co., Ltd. (lightning conductors); J. A. Pratt and Co. (channel gratings); John Wright and Co., Ltd. (gas radiators); J. and R. Howie, Ltd. (fountain); Eastwoods, Ltd. (bricks).

•

Liverpool Philharmonic Hall.

Architect : H. J. Rowse.

The general contractors were Morrison and Sons, Ltd., who were also responsible for the demolition, excavation, foundations, stone and stonework. Sub-contractors and suppliers included : G. M. Callender & Co., Ltd. (Callender's "Led-

kore" and lead dampcourses); Trinidad Lake Asphalte Co., Ltd. (asphalt); Trussed Concrete Steel Co., Expanded Metal Co. (reinforced concrete); R. Y. Ames (bricks); Liverpool Artificial Stone Co. (artificial stone); Redpath Brown & Co. (structural steel); Williams and Watson (glass); H. H. Martyn & Co. (cast lead and metalwork); Korkoid Decorative Floors, Ltd. (patent flooring); Sika Francois, Ltd. ("Sika" waterproofing compound); Richard Crittall & Co. (central heating, boilers and ventilation); Liverpool Gas Company (stoves); R. W. Haughton, Ltd. (gasfitting and plumbing); Higgins and Cattle, Ltd. (electric wiring, electric light fixtures, electric heating and bells); Rowe Bros., Ltd. (sanitary fittings); Quiggin Bros., Ltd. (door furniture and cloakroom fittings); Henry Hope and Sons, Ltd. (casements and window furniture); Automatic Telephone Co., G.P.O. (telephones); Waygood-Otis, Ltd. (rolling shutters and lifts); Mather and Platt, Ltd. (fireproof doors); Geo. Lowe and Sons, Ltd. (iron staircases); Hampton and Sons, Ltd. (plaster, decorative plaster, joinery, textiles and furniture); John Stubbs and Sons, Ltd. (marble and tiling); Conways, Ltd. (tiling); Walturdaw Cinema Supply Co., Ltd. (seating); Bath Cabinet Makers Co., Ltd., Frederick Tibbenham, Ltd. (furniture); Roneo, Ltd. (office fittings); Pilkington Bros., Ltd. (clocks); Daymonds, Ltd. (plastic letters, office fittings); Bull

Motors (Branch of E. E. & F. Turner, Ltd.) (Bull super silent motors).

•

**Southfields Branch Library,
Leicester.**

Architects : Symington, Prince & Pike, FF.R.I.B.A.

The general contractors were George Gurney & Sons. Among the sub-contractors and craftsmen were the following :—United Tile Manufacturers (bricks); Empire Stone Co., Ltd. (artificial stone); W. Richards, Ltd. (structural steel); J. A. King and Co., Ltd. (special roofings); Mellowes and Co., Ltd. (patent glazing and dome lights); J. Hewetson and Co. (wood block flooring); Constone, Ltd. (patent flooring; terrazzo dados); Maddock and Wright, Ltd. (central heating); J. Orton (Electricians), Ltd. (electric wiring); Best & Lloyd, Ltd. (electric light fixtures); William Freer, Ltd. (plumbing); George Pick & Son (door furniture; metalwork, wrought iron gates and railings); Crittall Manufacturing Co., Ltd. (casements and window furniture); Samuel Elliott & Sons (Reading), Ltd. (revolving doors); Gypsum Mines, Ltd. (Sirapite plaster); Inglestant, Ltd. (furniture); J. Coles and Son (shrubs and trees); Evans Lifts, Ltd. (book lift); Gent and Co., Ltd. (electric clocks).

New address for Executor & Trustee facilities

The Directors of the Westminster Bank announce that the Chief Office of the TRUSTEE DEPARTMENT at 53 Threadneedle Street, London, E.C.2, has removed to temporary headquarters at

8a Christchurch Road
Bournemouth

which is the existing Trustee Office in that town: to this address all correspondence should be sent.

Westminster Bank
LIMITED
Trustee Department
8A CHRISTCHURCH ROAD, BOURNEMOUTH

HOSPITAL EQUIPMENT

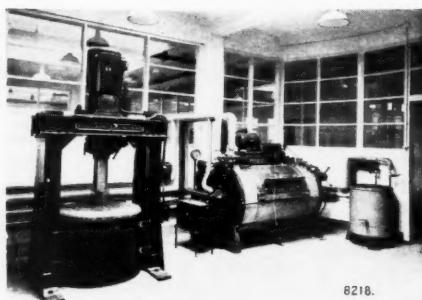


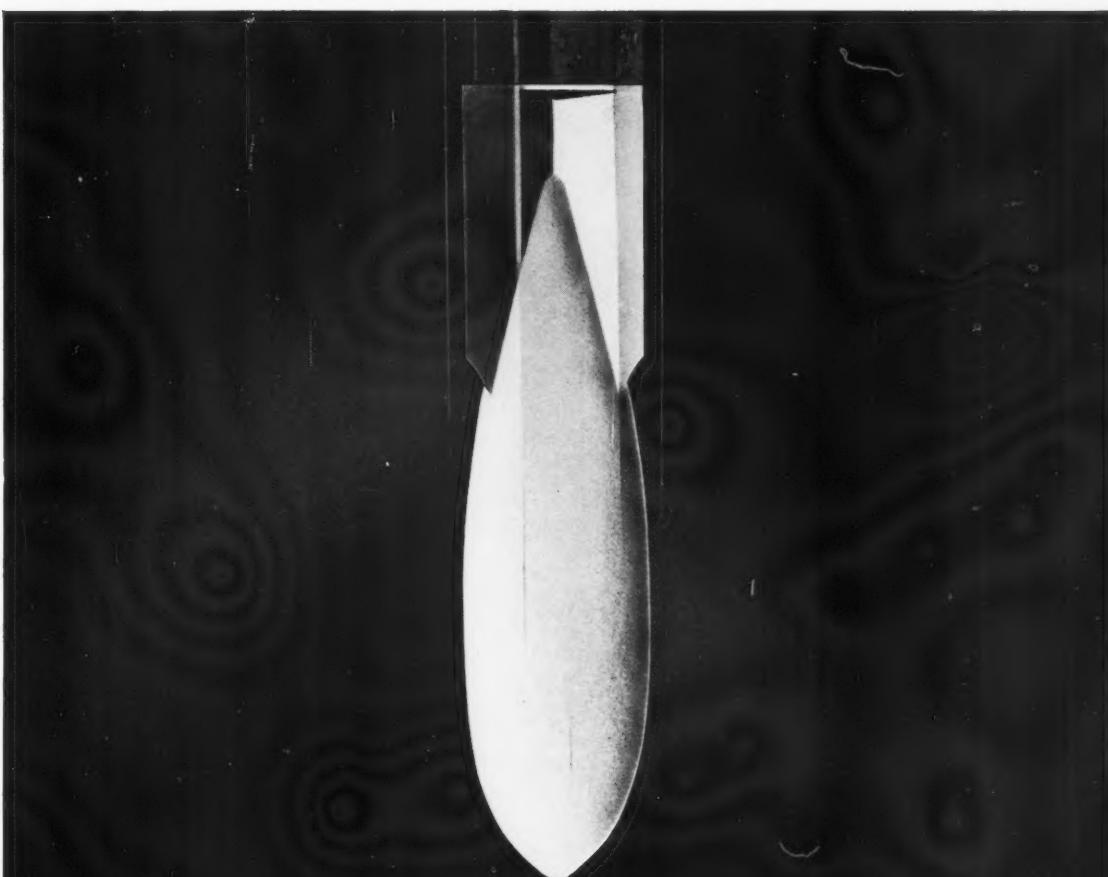
Fig. 8218—Installation for the treatment of Foul Linen at the Birmingham Hospitals Centre (The Queen Elizabeth Hospital.)

**LAUNDRY MACHINERY,
STERILIZERS AND DISINFECTORS,
INCINERATORS.**

Manlove, Alliott & Co. Ltd.

NOTTINGHAM

LONDON OFFICE: 41 & 42, Parliament St., Westminster, S.W.1



THE advantages of reinforced concrete in providing the fullest possible measure of protection against aerial attack have been amply demonstrated in recent times. Bradfords have been leading concrete engineers for over forty years. They have a long experience in this field and possess an unrivalled knowledge of to-day's requirements.

BOMB-PROOF SHELTERS
GAS & SPLINTER PROOF SHELTERS
TRENCH & TUNNEL SHELTERS
COMMUNAL SHELTERS
FAMILY SHELTERS
DECONTAMINATION CENTRES
FIRST AID POSTS
WATCHING POSTS
EXISTING BUILDINGS STRENGTHENED & ADAPTED ETC. ETC.

F. BRADFORD & CO. LTD • FERRO-CONCRETE ENGINEERS
ANGEL ROAD • EDMONTON • LONDON • N.18. Tottenham 4269

BRADFORDS for CONCRETE

McN 3361/3

Trade News and Reviews

By

BRIAN GRANT

Marking Time

THE sudden change from a state of complacency to a state of emergency has produced—not unnaturally—considerable confusion in the building world.

The lot of the architect is indeed a hard one. Those that have work to do have more than enough of it; less fortunate members of the profession have nothing to do and long days and pitch black nights in which to do it. They are "reserved." Reserved for what? Maybe we shall soon have the answer to this question.

For the present they must "mark time."

Those architects, and there are fortunately a goodly number of them, who have been given work to do in connection with civil defence and what may be described as "defensive armaments" have problems in plenty before them. Taken off their normal work (precipitated, many of them, from their normal offices into sundry Government and local Council offices) they are grappling pretty frenziedly with a new set of problems and a new technique.

What I do deary in this present war, so far as it has gone, is the extent to which we are being subjected to "black out." I refer not to our nocturnal discomfort—this we understand and accept—but to the quite un-understand-



The old Doulton building has now been replaced by a more modern structure on a site further along the embankment. Dating from 1876, its Gothic windows, Classic balustrade and Moorish tower have made it a landmark to most people and an object of nostalgic veneration to some.

able "black out" by day, the withholding of vital information which to most of us, whatever our trade or profession, is so essential if we are to be allowed to carry on with our jobs to the best of our ability.

of advice and technical information is more eagerly sought after now than ever it was before.

Architects engaged on non-Government work are finding it even more difficult to get information of any sort from any source—much to the irritation of their clients.

Development and Research Associations

One thing I have noted with surprise and disappointment is the absence from my mail and from the technical press of the type of sound and informative propaganda that the various Development and Research Associations have in recent years so regularly and intelligently indulged in. One must assume that these Associations are working in closest contact with the Government departments and authorities deputed to organize and expedite the progress of civil defence and emergency building operations. One must assume, therefore, that these Associations already know quite a lot and that in a very few weeks time they will know a whole lot more. All this, of course, is mere assumption. I stand to be corrected, but I trust that I am right.

Manufacturers I have spoken to feel very much the same way about things. They are "marking time" and are wondering rather distractedly just how long it will be before they are able to break into a slow trot. The right sort

These are early days to be sure, and in fairness we must concede that the task in hand is one of considerable magnitude.

It is, though, to be hoped that helpful information will be released and publicised as and when it becomes available and that the various Development and Research Associations will lose no time in re-establishing a helpful contact with architects.

Shatter-resisting Varnish

In the past several weeks a new form of window decoration has been evolved. Competition is keen. Mrs. Jones, who first thought of uniting function and decoration, introduced a simple diamond pattern with neat effect. The Brownses, not to be outdone, went one better only to note with envy two days later that the Williamses quite capped the lot by a very "dinky" and most elaborate form of patterning. I refer of course to the gummed paper strips that are being plastered all over windows in order to

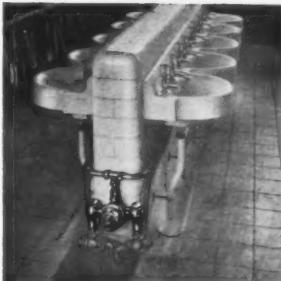
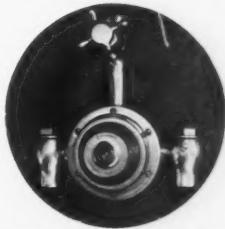
"The safest water mixing valves are THERMOSTATICALLY controlled suitable for working on unequal pressure supplies"



Board of Education Circular (Physical Training Series, 14/1938).



Courtesy of Leicester County Council. Single Showers, Loughborough Technical College.



Courtesy of Borough of Wednesbury. Crew Road School, Walsall. Leonard Valve on range of School Hand Basins.



Courtesy of Walsall Borough Council. Wash Fountain at Delves School.



Courtesy of Colly Hurst Nursery School, Manchester. Range of Basins with Leonard Valve.

Leonard-Thermostatic water mixing valves, which have been used in hundreds of schools already over the last two years, are now recommended as standard practice for all schools. Hot water is everywhere used as if it cost nothing, but the coal bill of Institutions where it is used for washing show how far that is from the truth. Wherever group washing takes place, as in schools, factories, hospitals, barracks, passenger ships, holiday camps and such places, there is no need for every user to make his own blend of hot and cold. With Leonard-Thermostatic Valves, hot water can be supplied at the temperature best suited for the job in hand and those who provide it can determine the temperature at which it is to be used. Thereafter, the Valve will keep it there, no matter what fluctuations occur in the supply system. Leonard-Thermostatic Valves have been specified by more than a hundred leading Architects. They have been adopted as standard equipment by thirty County Councils and two hundred Municipalities.



Courtesy of the Leys School, Cambridge. Leonard Valve on Boys' Showers over Plunger Bath.



Courtesy of G. Hart, Esq., M.I.V.E., Birmingham Educational Committee. Leonard Valve on Boys' Tennel Shower.

Specify **Leonard-Thermostatic** water mixing valves for washing appliances

Send for illustrated pamphlet from manufacturers:

WALKER, CROSWELLER & CO. LTD.

Phone :
Cheltenham
5172 (3 lines)

WHADDON WORKS, CHELTENHAM,

LONDON OFFICE: 6 GORDON SQUARE W.C.1.

GLOS. TELEGRAMS :
Instrukemi,
Cheltenham

PHONE MUS. 3107



© 61-46



The new G.E.C. cooker model DC105. Amongst other features it contains the largest grill boiler unit ever fitted to a cooker of this size.

render them less dangerous in air-raid time.

Now the Jones', the Brownses and the Williamses are all very disgruntled because the Smiths' a little further down the road have discovered an almost colourless transparent varnish which when applied by brush or spray to both sides of the window performs precisely, and rather more effectively, the same job as the gummed paper without reducing the light transmission to anything like the same extent.

Cerrux shatter-resisting varnish is made by Cellon Ltd.—its application ensures a tenacious, tough, elastic and almost colourless film which considerably increases the resistance of any glass structure to blast and shatter. Two coats are necessary and may be applied by brush or spray. Covering capacity is 40/45 square yards per gallon, drying time 4 to 6 hours and price per gallon twenty shillings retail.

I imagine that most good builders' merchants and ironmongers will carry stocks but should you have difficulty in obtaining supplies get into touch with Cellon Ltd., Kingston-on-Thames. Telephone number, Kingston 1234.

Adaptability

With commendable celerity have many manufacturers switched over from peace work to war work; indeed, one dare not these days hazard a guess at what might be going on behind the innocent looking façade of any factory or workshop.

Perambulator factories may now be turning out machine guns, though weddings have been so numerous in the past few weeks that one cannot foresee a very rapid falling off in the sale of baby busses. Unpleasant to reflect that the chubby, red-cheeked infant pushed hither and thither twenty years ago in Messrs. So-and-So's perambulator de-luxe may tomorrow be squatting in some sodden, camouflaged emplacement surrounded by the same Messrs. So-and-So's super-deadly 1939 model machine guns.

bouring in their many cracks and crevices the strangest battalions of germs and insects. How invidious was the lot of the old-fashioned Sarah Jane.

Now Sarah Jane has gone (bless her heart how she laboured!) and the modern Myrtle, trim and perky, trips around her glistening stream-lined apartment whilst her favourite crooner bubbles about "lurve" to the romantic strains of Harry Roy's band.

Latest G.E.C. electric cooker is illustrated on this page. This new model DC. 105 is a larger addition of model DC. 100 which was described in these notes some months back.

Its dimensions are 42 ins. high, 25 ins. wide and 23½ ins. deep and its total loading is 8,400 watts.

Without ovenmaster it costs £17 10s.; the de luxe model finished in white porcelain with coloured fittings costs £21. (The General Electric Company, Magnet House, Kingsway.)

In the building industry many strange transformations have been effected. Ecclesiastical woodworkers, whose craftsmen in peaceful days carve fine reredoses, are now making A.R.P. equipment, furniture for camps and hospitals and gas-proof screens and shutters. Metal craftsmen are making tubular steel stretchers and hospital beds. Furniture manufacturers and upholsterers have forsaken Chippendale and Heppelwhite for canteen benches, sandbags and hospital mattresses. At least so I am informed—but Dame Rumour is infernally busy these days.

Design in the Kitchen

The ship-shapeliness of the contemporary kitchen is something that we have to be truly thankful for.

It is not a very far cry back to the old basement kitchen, large and replete with dirt traps; the huge open grates, so uneconomic and so thirsty for black lead; the clumsy open dressers har-

Water Heaters for Decontamination Showers

I have received details, and photographs, of a recently completed decontamination shower centre installed at the A.R.P. headquarters in Camden Town. A photograph showing a corner of the shower room is reproduced below.

The main apparatus consists of a large G.E.C. storage heater of 300 gallons capacity. The heater has a galvanized steel interior efficiently lagged with



A section of an A.R.P. decontamination shower installed by the G.E.C. The mixer valve which maintains the required temperature is fixed at the top of the right-hand wall near the corner.

The Architect's Vision in Reality



Messrs. Hoare & Wheeler, F.R.I.B.A., Architects

CAST STONE
by
STUART'S
GRANOLITHIC CO. LTD.

ESTABLISHED 1840



FLOORS
in Situ & Pre-cast
REINFORCED
CONCRETE
Design and
Construction
CAST STONE
STAIRCASES
GRANOLITHIC
PAVING

★ LONDON :
101 Baker Street, W.1
Telephone : WELbeck 3775

★ EDINBURGH :
46 Duff Street
Telephone : Edinburgh 61506

★ MANCHESTER :
Ayres Road, Old Trafford
Telephone : Trafford Park 1725

★ BIRMINGHAM :
Northcote Rd., Stechford
Telephone : Stechford 2366

TRADE AND CRAFT

regranulated cork; the exterior steel casing is enamelled in white, the inside surface being treated with non-corrosive stoved paint. Incorporated with the heater is a chromium-plated water-mixing valve for regulating the shower temperature; adjustment of the valve is operated by a removable key so that when the required temperature has been obtained removal of the key makes it impossible for the pre-determined temperature to be exceeded. The total loading of the heater is 27 kilowatts.

An appeal for standardization

Immediately after Mr. Chamberlain's fatal announcement on September 3rd householders in and around London, and other cities and towns considered vulnerable to Goering's much advertised air arm, indulged in a quite hectic game of general post. Hundreds of people found when they got into their new temporary homes that their electric cookers, refrigerators, vacuum cleaners, wireless sets and etc., etc. were unworkable. New and costly armatures had to be fitted, the old lamps were unsuitable, new elements had to be purchased for the electric fires and a goodly bill had to be run up at a time when all were trying hard to practice strict economy.

It is high time that the electricity magnates gave us standardization. Manufacturers of electric appliances will surely

welcome the move every bit as much as the sorely tried general public.

We know that steps are being taken—for heaven's sake let's get the job done. It'll soon be 1940 and electricity is not very newborn.

Old and New Addresses

In a postbag filled with notifications of changed addresses I have a communication from Messrs. Doulton advising that they are maintaining their headquarters in Lambeth. They are, however, making a move in the immediate future—a move of approximately 300 yards—as their new Head Office on the Albert Embankment is nearly ready for occupation. I suppose this means that the old Doulton building, illustrated at the head of these notes, strangest and one of the best known of all buildings on the south bank of the Thames, is due for demolition. One will regret its passing, it has for so many years provided relief in a district devoid of any other sort of interest at all. What, I wonder, shall we see in its place?

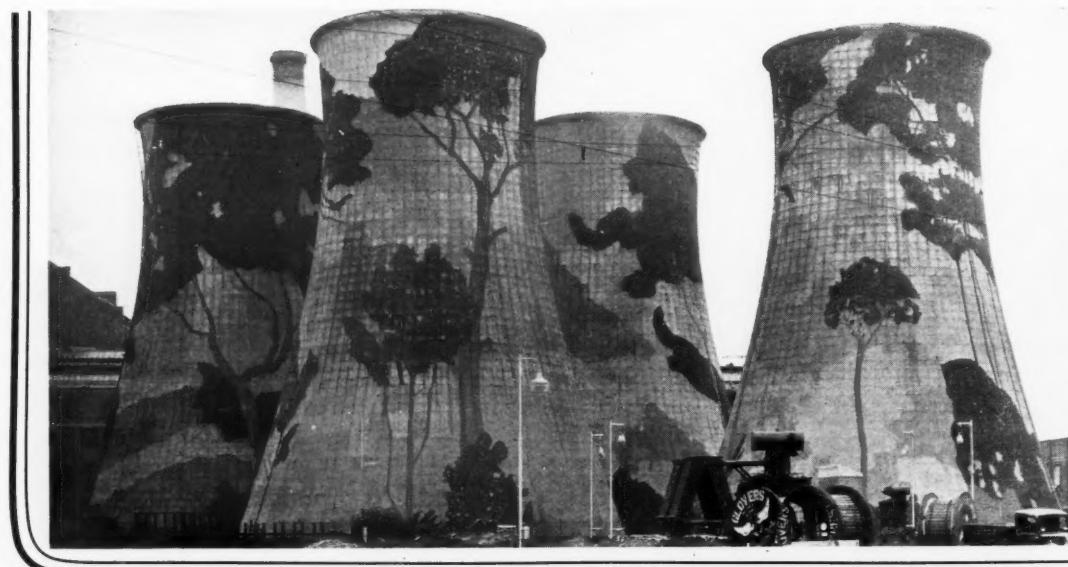
The new Doulton building, six storeys high, has been designed to exemplify the many uses of modern ceramic materials in contemporary construction and decoration. T. B. Bennett & Son are the architects.

Other notifications of changed addresses include the following:—Communications to Bakelite Ltd. should be addressed to Brackley Lodge, Brackley, Northamptonshire. The British Aluminium Company are in residence at The Raven Hotel, Shrewsbury. Holland and Hannen & Cubitts Ltd. have moved to Ivy House, Inner Park Road, Wimbledon. Also in Wimbledon are Holloway Brothers Ltd., The Priory, Wimbledon Common, and J. L. Keir & Company, 88 Wimbledon Hill. The London office of Mellowes & Co. Ltd., have moved to "Fairleigh," 38 Priest Hill, Caversham, Reading.

There are very many more. Should you have any difficulty in tracing the whereabouts of any firm in the building industry, or any firm of architects, telephone The Architectural Press—Vigilant 0087.

Barricades

The sandbag barricades look awkward and out of place. That they are inelegant in appearance does not really matter one jot; what does matter is that many of them have been built up so awkwardly that they will, when put to the test, prove sadly inadequate. This criticism does not apply to the work of local authorities who have known long enough the correct methods, but to the private individual who has done his energetic best without



CAMOUFLAGED with "STIPPOLO"

Fourteen tons of "Stippolo" Oil Bound Water Paint is the estimated amount used on these 120 feet high towers and their camouflaged appearance is causing considerable interest throughout the country.

Architects, A.R.P. Officers, Public Authorities and others interested in Camouflage painting are invited to test the weather resisting properties of "Stippolo" and to write for further particulars relating to the successful painting of large buildings such as those illustrated. Literature and prices of "Kearsley" A.R.P. products sent on request.

The illustration is by kind permission of John Mould, Esq., General Manager, City Electricity Service, Leicester. The colour scheme was designed and supervised by E. Townsend, Esq., Cathedral Studio, 31 Full Street, Derby.

ROBERT KEARSLEY & CO., RIPON, YORKS

The outstanding material
for sanitary fittings

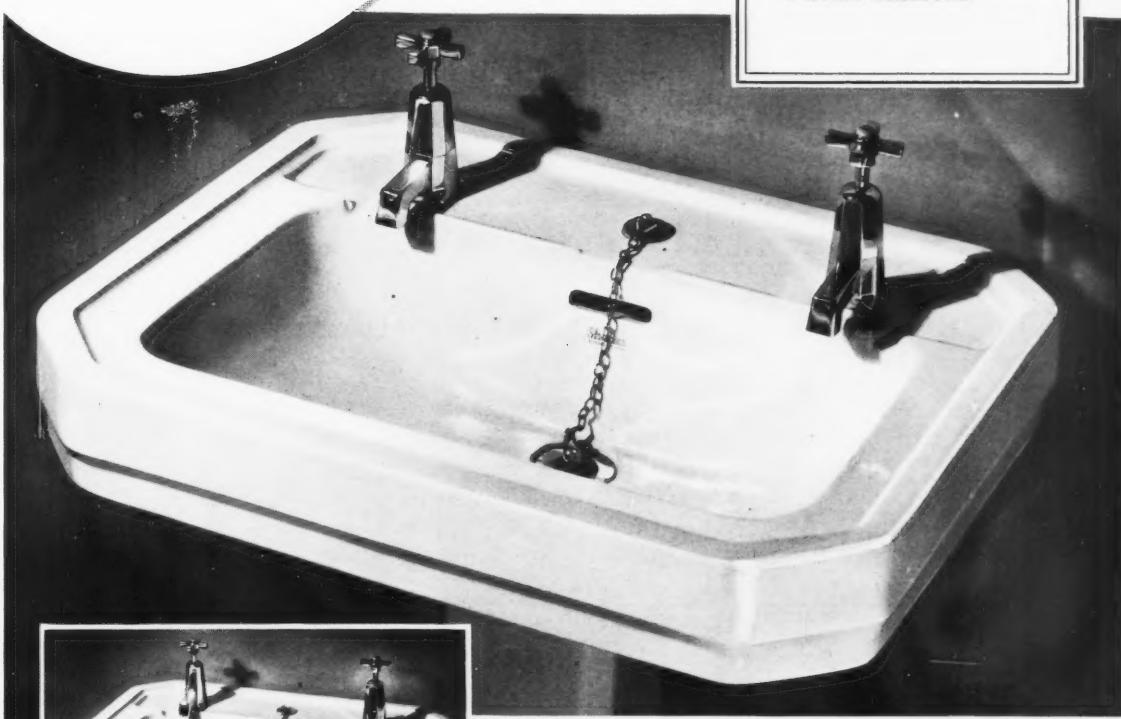


Illustration shows Shanks' Vitreous China Lavatory the "Carford."

Shanks Genuine VITREOUS CHINA

Showrooms : LONDON 81 New Bond Street, W. 1.
MANCHESTER 12 Deansgate, 3 . . . NEWCASTLE-ON-TYNE Carlisle
Square, Manors, 1 . . . GLASGOW 189 West George Street, C. 2 . . .
HEAD OFFICE & WORKS: Shanks & Co. Ltd., Barrhead, Scotland

TRADE AND CRAFT

realizing that even the laying of a sandbag calls for some sort of technical knowledge. The building of sandbag walls is, by the way, dealt with in an Air Raid Precaution Handbook issued by the Home Office.

Rot-proofing of Sandbags

Sandbags used for barricades in the open should be submitted to some form of rot-proofing process. I was shown a month or so ago a photograph taken in June 1939 of a sandbag barricade erected in September 1938—the hessian sacking was already in an advanced state of decay, sand was gradually but continuously escaping from the burst sandbags and the barricade was in such a state of disintegration as to make collapse imminent. There are many rot-proofing processes and none of them are costly. It is claimed that by the Cuprinol process sandbags are rendered permanently rot-proof at a cost of no more than 1d. per bag treated and I am told that this process is used by the Admiralty, War Office, Air Ministry and many of the principal Government Offices. Replacing sandbags at a later date will be an expensive and troublesome task, if indeed they are obtainable. To leave barricades unprotected is a foolish and dangerous extravagance. The distributors of Cuprinol products are Messrs. Jenson & Nicholson.

The Buildings Illustrated

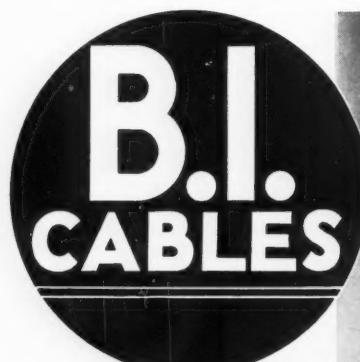
House at Welwyn Garden City Architect : E. C. Kaufmann

The general contractors were Viner & Son Ltd. Among the sub-contractors and craftsmen were the following :—G. M. Callender & Co. Ltd. (dampproofing), Hertfordshire Brick Co. (bricks), A. D. Dawnay & Sons (structural steel), Williamson Cliff Ltd. (tiles), D. Anderson & Sons Ltd. (macasfelt for special roofings), Wellmuth Ltd. (partitions), James Clark & Son Ltd. (obscured glass in bathroom and W.C.), R. Cattle Ltd. (wood block flooring, joinery, furniture), Cork Insulation Co. Ltd. (cork flooring in bathroom and kitchen), W. Richardson & Co. Ltd. (central heating), G. Matthews Ltd. (fireplace in living-room), Ideal Boilers and Radiators Ltd. (boilers), Phoenix Electrical Co. Ltd. (electric wiring, electric heating), New Light Fittings Ltd. (electric light fixtures), Alfred Goslett & Co. Ltd. (sanitary fittings), Stanley Jones & Co. Ltd., J. D. Beardmore & Co. Ltd. (door furniture), Crittal Manfg. Co. Ltd. (casements), Loft Ladders Ltd. (loft ladders), O'Brien Thomas & Co. Ltd. (Coburn track to sliding door between living- and dining-room), J. Starkie Gardner Ltd. (metal-work), E. Barton & Co., Ltd. (tiling), John Line & Sons Ltd. (wallpapers).

F. C. Courten Ltd. (shrubs and trees), Permitit Co. Ltd. (water softening plant), Henry Wiggins & Co. Ltd. (monel metal sink), Sparton Refrigerator (refrigerator), Servis Co. (Servis washing machine).

Offices in the Adelphi building Architect : Michael Rachlis

The general contractors were Gee, Walker & Slater Ltd. Among the sub-contractors and craftsmen were the following :—William Mallinson & Sons (supplied veneers as follows : Courbaril, general office and visitors' lounge; English plane, board room; Indian greywood, Stripey ash, Peroba, English elm, private offices; Peroba, directors' lobby). Troughton & Young Ltd. (electrical wiring and installations), Architectural, Constructional & Electrical Utilities Ltd. (electric ceiling fittings and wall brackets, anodically treated in silver, gold and black; aluminium window frame to mailing room and aluminium radiator grilles and door grilles), Comyn Ching & Co. Ltd. (aluminium door furniture), Art Metal Construction Co. Ltd. (barrier to entrance waiting room gates), Acorn Products Ltd. (aluminium wastepaper baskets, anodically treated in silver and gold, also aluminium desk sets), Best & Lloyd Ltd. (aluminium desk lamps), J. Avery & Co. Ltd. (aluminium sunblinds), Melson Bros. (upholsterers), Norman Plumridge Ltd. (carpets).



This magnificent new Cape-town building consists of a modern theatre surrounded by 49 flats, the whole of the premises being wired with **B.I. Cables**. Each flat is equipped with electric hot water cylinder made with **B.I. Copper Sheets and Discs** by Messrs. Albert Vaux & Co., (Pty) Ltd., Capetown. Consulting Engineers: Messrs. Viljoen & Keyter, Capetown. Electrical Contractors: Messrs. Edward A. Shaw & Co. (Pty) Ltd., Capetown.



The
COLOSSEUM
THEATRE,
CAPE TOWN.

BRITISH INSULATED CABLES LTD., PRESCOT, LANCS.

Tel. No. Prescot 6571. London Office, Surrey House, Embankment, W.C. 2. Tel. No. Temple Bar 7722

"WELL BUILDING HATH THREE CONDITIONS

Firmenesse, Commoditie, & Delight"



From "The Elements of Architecture,"
translated from the Latin of Vitruvius
by SIR HENRY WOTTON, 1624.

SIR HENRY WOTTON coined this splendid phrase to describe the essentials of "well building." "Firmenesse, commoditie, and delight" were his three conditions; as desirable then as they are to us in the twentieth century. Only with this difference: that science has given us means to those worthy ends undreamed of in 1624.

Today, when the architect wishes to make his work strong, spacious, comely, and a fitting expression of the spirit of his times, he does not lack beautiful, enduring, and tractable materials.

He has steel for the skeleton of his

buildings; concrete for the fabric. He has bricks of a dozen different sorts, tiles, marble, and stone from a wide world of quarries. Science and research have given him new kinds of glass, plastics, and aluminium, with their exciting possibilities, and not a year goes by without perfecting some new material or method to simplify his work.

This is particularly true of aluminium. Although most architects know that aluminium is strong and one-third the weight of steel, is rustproof

and crackproof, resists corrosion and retains its bright beauty with the minimum of cleaning, there are always improvements in alloys and new applications for sheet, extruded sections, forgings, and castings unfamiliar to those outside the aluminium industry.

We would like to draw your attention, therefore, to our Advisory Service Department which is equipped to answer any technical question concerning the use of aluminium in architecture. At present, however, we are only in a position to fulfil Government contracts and sub-contracts for the supply of aluminium.



NORTHERN ALUMINIUM CO. LTD.

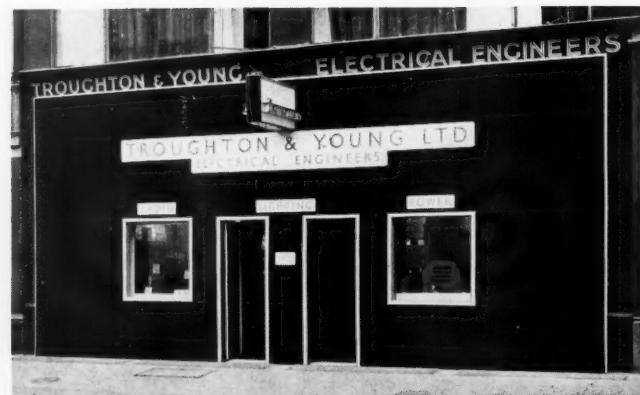
BANBURY, OXFORDSHIRE. Phone: BANBURY 2244. BIRMINGHAM: MIDDLEMORE ROAD, HANDSWORTH, 21. Phone: BIRMINGHAM NORTHERN 3671.
P.T.

Trade News

and

Reviews

By BRIAN GRANT



Messrs. Troughton and Young's new protected shop front designed by A. B. Read in black, buff and emerald green colourings.

The Building Front

News from the building front is not encouraging. There would appear to be ample evidence to show that with a little bit of clear thinking on the part of officialdom the position generally could be considerably improved and the unemployment figure considerably reduced. It does seem that the work in hand could with benefit be distributed amongst a greater number of firms. Certain architects, quantity surveyors and building firms are getting the lions' share whilst others are getting no share at all—on the one hand you hear complaints that "they just can't cope with it," in another quarter you find idle brains and hands wishing like hell that they had something to cope with.

This should not be. It is entirely unjust that the few should profit and the many suffer.

We know that the Government's programme must be carried out with all expediency, that the major consideration must be "getting the job done with the least possible delay" and it was natural therefore that a few individuals and a selection of most suitable organizations should be given the responsibility of supervising and planning. Too many "cooks" at the head of affairs would be likely to multiply confusion.

It is to my mind, however, imperative that the interests of the whole of the building industry be considered; the

actual execution of work must be shared out, the smaller firms must not be left to languish and finally expire through a prolonged period of enforced inactivity. Better that the majority shall be enabled to carry on with a minimum of hardship and loss, than that the few shall be kept going busily and profitably to the extinction of the many. With time on my hands I have had much opportunity during the past few weeks for journeying round and about London and the southern counties and have made it my business to be exceedingly inquisitive. What I have seen and heard has not been reassuring.

•

Let it be agreed that there must and should be centralization of supervision and that the larger firms in the industry are better staffed and organized to undertake control; control, however, should not permit such organizations to delegate the whole of the work to themselves. Control and supervision should incorporate a plan to distribute the work as widely over the whole of the industry as expediency will permit. It is certainly not politic, and surely it cannot be expedient, to have one third of the industry struggling to get through so large an amount of work that they can scarcely cope with it whilst the other two thirds stand by competent but idle.

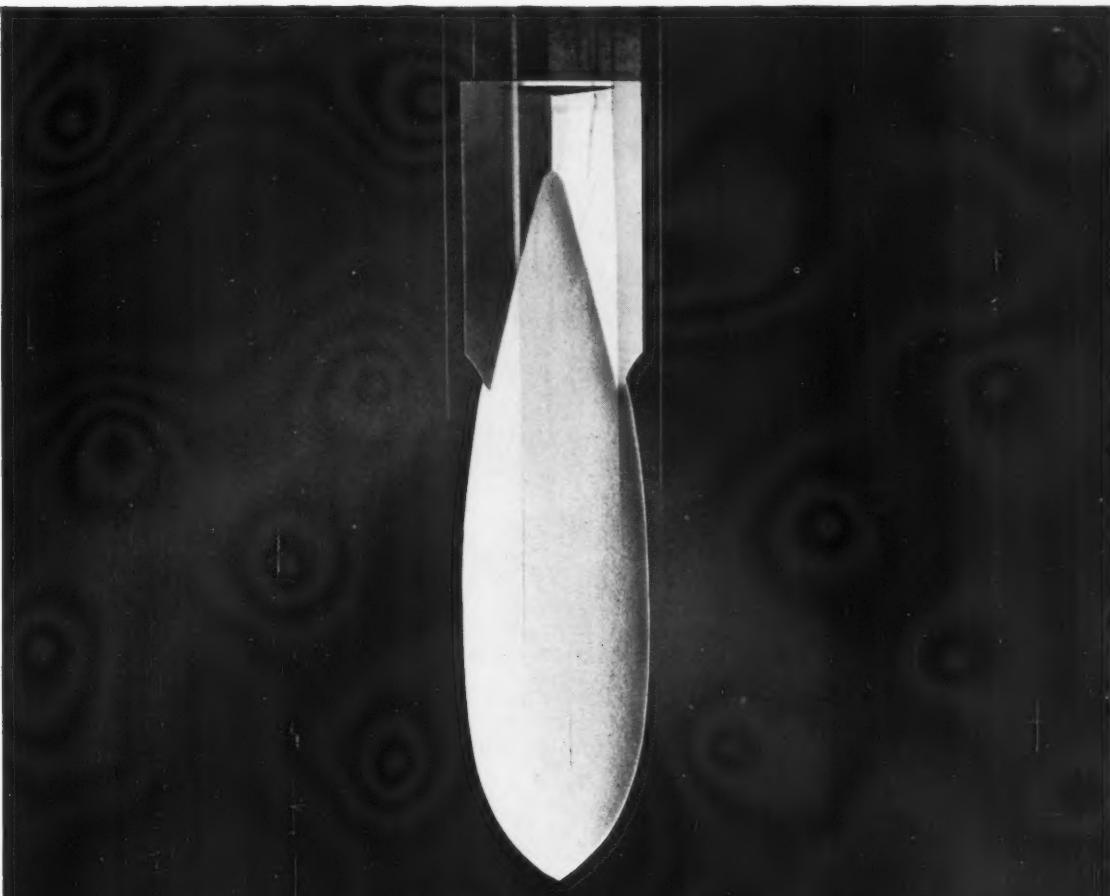
•

One possible solution to the problem would be the appointment of District Supervisors in different areas throughout the country who would be responsible for arranging that the work in his area be

distributed as fairly as possible amongst all those firms capable of carrying it out efficiently and expeditiously. In each area the various sections of the industry (architects, surveyors, general contractors, electrical contractors, etc.) would nominate their own individual representatives; these representatives would be kept fully informed about all building work to be carried out in the area, and would plan the letting and sub-letting of all contracts. All this may sound a trifle involved and irksome, in fact it is not even novel. Building "rings" have been in operation for many years, their motives have not always been entirely meritorious; usually they have been formed to obviate cut-throat competition, sometimes co-operation of this sort is indulged in so that the participants may make grossly exaggerated profits. Whatever the motive they have worked, mostly, and in times such as these there is an urgent need for goodwill and beneficent co-operation. "The survival of the fittest" is an old war cry, but on the home front co-operation is a much saner policy than each man for himself.

•

In regard to the selection of building materials—here again we find that the building front is composed of the "haves" and the "have-nots." Certain manufacturers are working at over-pressure in order to fulfil the demands being made of them whilst others are despondently inactive—it would seem that insufficient consideration is being given to alternatives. The powers that be having at the outset decreed that a certain material



BRADFORDS are maintaining a complete service at their usual address. Their plans for meeting the present emergency have been carried out with perfect smoothness. For general concrete construction as well as for A.R.P. work they are able to serve their clients with their characteristic speed and efficiency.

F. BRADFORD & CO. LTD · FERRO-CONCRETE ENGINEERS
ANGEL ROAD · EDMONTON · LONDON · N.18. Tottenham 4269

PRE-CAST UNITS
FOR
TRENCH LININGS

FIFTY-PERSON
SHELTERS

COMMUNAL SHELTERS

DECONTAMINATION
CENTRES

FIRST AID POSTS

EXISTING BASEMENTS
STRENGTHENED

ETC. ETC.

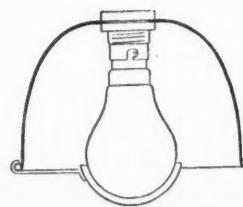
BRADFORDS for CONCRETE



Two lighting reflectors designed and produced by the Holophane Co. for black-out conditions. Above, and in section on the right is a reflector of .002 foot-candles intensity for the exterior illumination of factory and railway yards, docks, etc. The example below of 0.2 foot-candles intensity is designed for interior use in covered entrances or loading bays.

must be carefully reserved for "Government priority" are now demanding practically the whole of the country's output of those particular materials whilst the manufacturers of entirely suitable alternative materials are nursing an unwanted stock.

Timber, mostly imported softwoods, is being used for construction to such an extent that there is or may be in the immediate future an embarrassing shortage of available supplies. British bricks from British clay are, I understand, available in large quantities and many brick manufacturers would like to know what future demand they should be prepared to cater for. If this international quarrel is going to last two, three or four years then we must plan ahead, industry must be well informed and given every opportunity of planning ahead for its own preservation; if the quarrel is eventually going to turn into a real war then we shall find ourselves compelled to rely more and more on the use of home materials. In the building and the agricultural industries we should now be giving every encouragement and the greatest possible measure of support to home production.



SECTIONAL DIAGRAM OF LAMP AND REFLECTOR

One other point before I bring this somewhat baneful harangue to a conclusion. Way back in 1938 and earlier visits of inspection were paid to factories in all parts of the country and plans were made for many firms to switch over, wholly or partially, immediately on the outbreak of war to the production of war materials and equipment.

In the main these plans have now been put into operation, but in some cases manufacturers are without instructions and have, therefore, certain sections of their machine shops standing idle.

They await the "Go-ahead" signal and will be not a little relieved when it is given.

Light in the Black-out

Lighting catalogues these days are really rather amusing, the designer of fittings has had to put himself into reverse gear, as it were, and design fittings that provide not a maximum of light but a minimum and all the old standards of efficiency and foot-candles intensity play no part at all in current considerations. (Double meaning not intended.) Of course, I am referring to fittings for exterior illumination.

As it will not be possible to suspend all outside work during the hours of darkness, some lighting has to be permitted for essential work of national importance in such places as factory yards, docks and railway yards. (We should, indeed, be permitted a minimum of lighting in the streets, but more about that anon.)

The Holophane Company have produced a range of special lighting fittings for different black-out requirements and describe some of these in a small brochure they have just issued. The fitting illustrated at the top of this page is a British Standard A.R.P. unit designed for the illumination of factory, railway and dock yards. The units are constructed of heavy gauge sheet steel with cup and supports arranged to clip on the rim; a 1½-in. hole at the top enables the unit to be fitted to a B.C. shade carrier lampholder. Three finishes are used inside the reflectors so as to give the different candle-power intensities according to the mounting heights. These units must be vertically hung and should be spaced apart at distances not less than 4 times the mounting height; the mounting height should not be less

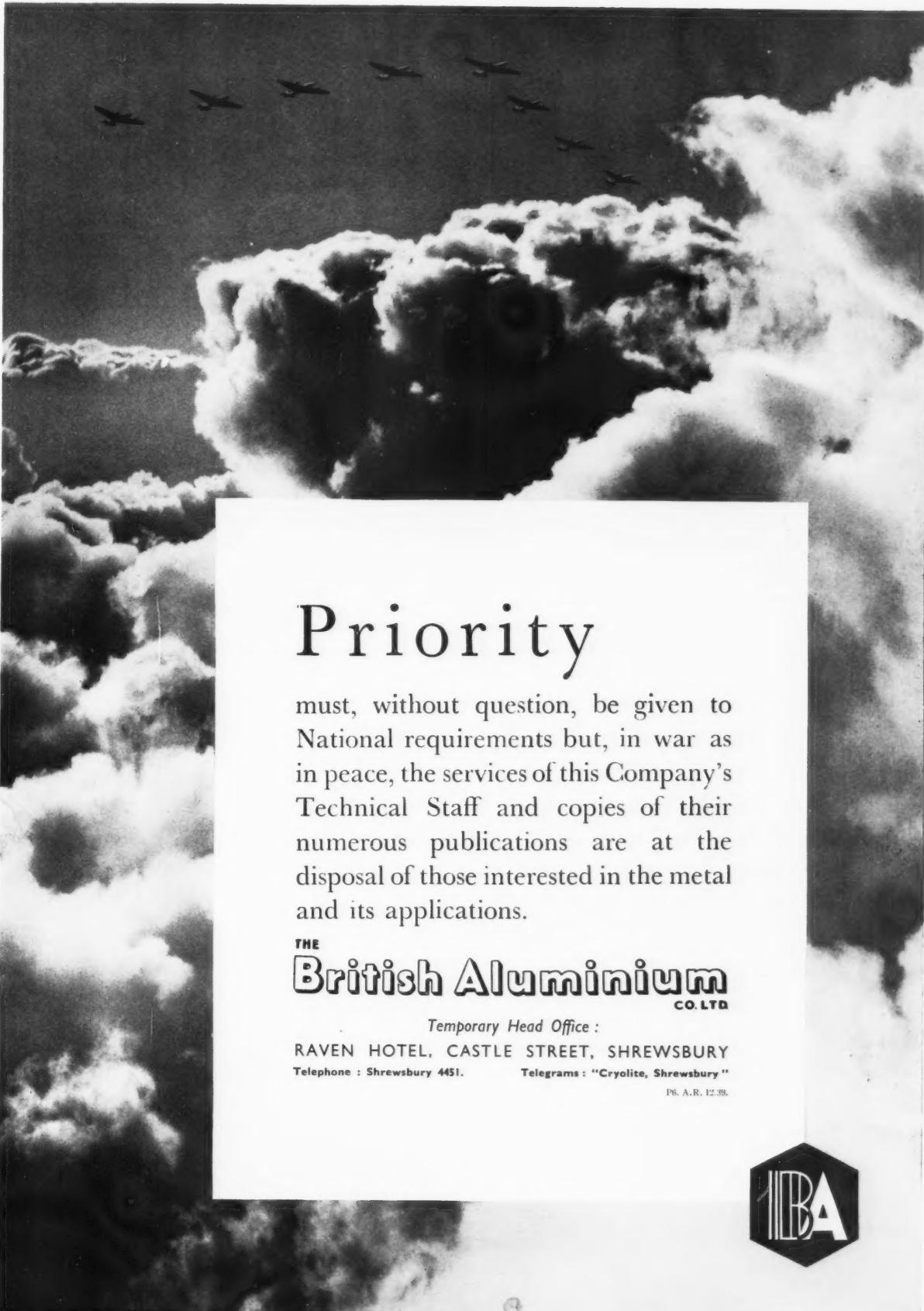
than 10, 15 or 20 ft. according to the type of reflector finish selected.

It is made in two sizes costing 4s. and 6s., respectively.

The second unit illustrated is a special prismatic reflector designed by Holophane for fitting to any existing B.C. holder and for use in covered entrances, loading bays and corridors where the light does not fall on open ground; it gives a higher illumination value than the B.S. unit, in fact 0.2 foot-candles intensity as against 0.02 or 0.002. The unit consists of an opaque metal cover fitted over a prismatic reflector and is designed to give efficient and uniform lighting over an extensive area when spaced at a distance apart of twice the mounting height above the floor; it costs, minus the lampholder, 6s. 6d. (Holophane, Ltd., Elverton Street, Vincent Square, London, S.W.1.)

Concerning street lighting, is it not just about time that a little light was shed upon this unreasonably dark subject? Certainly the Home Office authorities were extremely wise in enforcing the most stringent restrictions at the outset, but having now succeeded in establishing a complete black-out and with the knowledge that the stage is set, as it were, for an immediate response to any danger warning, need they continue with their insistence upon utter blackness? Happily, I am able most nights to dig myself in by the fireside, pull the curtains to and forget the black-out, but I have had a small share of night travel and can't pretend that I enjoyed it. I have studied the black-out from the point of view of the motorist, the pedestrian, and the railway and omnibus passenger and extend my unreserved sympathy to all those unfortunate people who have to be out and about after the sunset hour. One wonders what sort of special compensation or remuneration is being awarded to omnibus drivers these days, and hopes that due recognition is being given to their valour. They are doing their "bit"; indeed, in this strange and unreal war so far as it has gone, there are more arduous tasks being performed on the Home Front than anywhere on the Western Front. Is it not a fact that the death and injury toll on the roads is equal to or higher than that in the fighting zone?

Questions concerning street lighting have recently been raised in the House of Commons and Sir John Anderson in reply said that experiments had been made and were still in progress but that there were numerous objections to any of the suggestions so far put forward by illuminating engineers and consultants. I am surprised to learn that "only in a very few towns" is the street lighting controlled by a central control switch so that the whole of the lighting could be extinguished at a given signal and



Priority

must, without question, be given to National requirements but, in war as in peace, the services of this Company's Technical Staff and copies of their numerous publications are at the disposal of those interested in the metal and its applications.

THE
British Aluminium
CO. LTD

Temporary Head Office:
RAVEN HOTEL, CASTLE STREET, SHREWSBURY
Telephone : Shrewsbury 4451. Telegrams : "Cryolite, Shrewsbury"
P6. A.R. 12.39.

BAA

TRADE AND CRAFT

believed that, with the advent of the grid, lighting systems in all our major towns had been completely modernized. One must not forget, of course, that at least half the street lighting in the country is by gas which cannot generally be extinguished from a central point.

Is it not possible, however, to devise a type of modified street lighting of such low intensity that it would scarcely be visible to raiding aircraft, so that, where delay might occur in the extinguishing of such lighting, no effectual assistance would be given to the raiders even if the lighting was on during the progress of the raid? Perhaps some of our leading Industrial Lighting Engineers may be able to supply some interesting data on this very dim subject. Heaven knows, the Home Front can do with a little brightening!

Design in the Black-out

I like very well A. B. Read's solution of the display window problem though I think that he could with advantage have introduced more white in the façade at about eye level—a broad band of white across the whole length of the front, flush with either the bottom or top of the small display windows, would have served as a welcome aid to

despondent pedestrians on the blackest of black nights. As it is, however, the Troughton & Young shop front will be a helpful landmark by night, and by day how much more pleasant it is to look at than the usual sandbagged boarded-in efforts that seem to shout out aloud "Business here is far from as usual."

Refrigeration in the country

In the past few weeks I have received many anxious enquiries regarding refrigeration in the country. Town-birds now occupying cottages miles away from a mains supply of any kind are wondering just what they are going to do when the summer of 1940 arrives.

I have two suggestions to offer. In the first place one can still obtain those stone cooling cabinets that work very much in the same way as the Woolworth butter cooler; it will be found that they keep things quite satisfactorily cool, though of course nowhere near freezing. These cabinets vary in price from about 30s. to £3 or £4 according to size. For those who would wish for greater degree of refrigeration I would recommend the oil-operated Electrolux refrigerator. This (it has been on the market for many years) is a perfectly ordinary refrigerator which works in the same way as the gas-operated type, the only difference being that it is not quite so easy to control the freezing rate.

Zinc Development Association

In these notes last month I referred to Development Associations and suggested that they could be of great service to architects, builders and other technicians now busily engaged on emergency building work. Most of these Associations are of comparatively recent vintage but they have, some of them, very rapidly established a most useful contact with architects.

I have on my files a number of technical handbooks issued by various Development Associations to which I am, or was in happier times, constantly referring and I know that architects generally are fully appreciative of the helpful technical services that have been rendered by such Associations in recent years. In the present emergency there is more than a little confusion and any useful technical information that is made available relative to emergency building practice will be well received.

In reply to my notes of last month the Zinc Development Association write advising me that their technical services are still fully available to architects and are being rapidly supplemented by information concerning new regulations and orders. They also state that informative announcements will be published in their advertisements in architectural and building journals.

The Zinc Development Association's war duration address is Lincoln Building, 18, Turl Street, Oxford. Telephone number Oxford 47988.

the Pencil he uses makes all the difference to his work

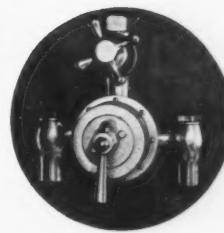
A man in a suit is working on a large drawing. A giant pencil, labeled 'VENUS', points towards him. In the background, there is a classical statue of Venus de Milo.

If you have any difficulty in being supplied, write direct to this address for sample, stating which degree you prefer.

VENUS PENCILS
VENUS PENCIL CO. LTD., LOWER CLAPTON RD., E.5

Leonard-Thermostatic water mixing valves

IN HOSPITALS & INSTITUTIONS



Chichester Hospital, equipped with Leonard Valves. Architect : C. G. Stillman.

Photo by courtesy of Architectural Press, Ltd.

In a big institution hot water may mean anything from water hot enough to make tea or sterilise apparatus to bathing a newly born child.

To get control of the temperature and keep it generally involves elaborate apparatus.

Leonard-Thermostatic water mixing valves afford control of the hot water temperature at the point of use by the simplest of means.

Leonard Valves made their name among Architects by keeping shower bath sprays steady in temperature

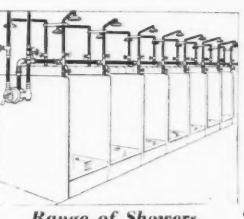
in spite of fluctuations in pressure. Patients and staff alike called down blessings on the head of the Architect who specified them.

Their supreme usefulness in this sphere has led to their use in other applications. Every day brings word of new uses that have been found for this most simple means of automatic control of water temperature at the point of application.

Our List of Users contains the names of some of the largest hospitals and institutions in this country.



Delivery Bath.



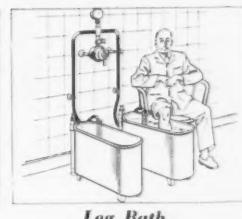
Range of Showers.



Surgeons' Washbasins.



Infant Bath.



Leg Bath.

Specify **Leonard-Thermostatic** water mixing valves for washing appliances

Illustrated pamphlet from the manufacturers :

WALKER, CROSWELLER & CO. LTD.

WHADDON WORKS, CHELTENHAM, GLOS.
LONDON OFFICE : 6 GORDON SQUARE, W.C.1.

Telephone : Cheltenham 5172 (3 lines).
Telephone : Museum 3107.



© 6x-57

TRADE AND CRAFT

Electrical heating in wartime

"Thermovent News," a monthly bulletin issued by E. K. Cole, Ltd., devotes its current issue to A.R.P. heating problems and solutions. The contents are sub-divided to deal with the heating requirements of shelters, first-aid centres, emergency hospitals and emergency business premises.

Thermovent heaters offer these advantages—they can be installed without any structural preparation; there being no "live" heat fire danger is practically eliminated and the method of heat diffusion provides uniform temperature conditions. Built-in thermostats control temperature and reduce current consumption to a minimum.

Copies of this bulletin are obtainable from E. K. Cole, Ltd., Southend-on-Sea.

The Buildings Illustrated

The Village College,
Impington, Cambridgeshire.

Architects : Walter Gropius
and E. Maxwell Fry.

Engineers.....R. T. James and Partners
Quantity Surveyor...William G. P. Potter
Clerk of Works.....F. S. Chappell
General Foreman.....A. E. Sheldrick
Foreman Joiner.....S. Quinney

.....Carpenter.....H. B. Hinde
.....Plumber.....W. Hunt
.....Bricklayer.....F. I. Greenall
.....Painter.....C. H. Cooper
Ganger Labourer.....A. A. Shead

The general contractors were Johnson and Bailey Ltd. Among the sub-contractors were the following: Williams and Williams Ltd. (metal windows), Granwood Flooring Co. Ltd. (flooring and underfloor heating), Brickart Ltd. (facing bricks), P. H. Allin and Sons (electrical contractors), Powers and Deane, Ransomes Ltd. (structural steelwork), F. McNeill & Co. Ltd. ("Foamagg" partition blocks), Whitehead Iron & Steel Co. Ltd. (concrete reinforcement), John Bolding and Sons Ltd. (sanitary fittings), Smith and Wellstood Ltd. (cooking range), The Parkinson Stove Co. Ltd. (warming chamber in kitchen), Cambridge University and Town Gas Light Co. (gas carcassing), Potter Rax Gate Co. Ltd. (cloakroom fittings), Septic Tank Co. Ltd. (sewage disposal), Donovan Flush Doors (flush doors (metal faced)), Merchant Trading Co. Ltd. (flush doors (Alder faced)), Cambridge Artificial Stone Co. Ltd. (reconstructed stone copings), Celotex Ltd. (Acousti-

Celotex), Tentest Fibre Board Co. Ltd. (insulating boards for ceilings), Masonite Ltd. (hardboard), C. A. and A. W. Haward (metalwork), J. Starkie Gardner Ltd. (commemorative tablet), Tile Decorations Ltd. (floor and wall tiling), W. H. Dean and Son Ltd., Richmonds Gas Stove Co. Ltd., Staines Kitchen Equipment Co. Ltd., General Electric Co. Ltd., General Iron Foundry Co. Ltd., Burco Ltd. (domestic science room equipment), Cubax Kitchen Cabinets Ltd. (kitchen cabinet), A. J. Binns Ltd. (ironmongery), James Clark and Son Ltd. (glazing), Cellulin Flooring Co. Ltd. (lino covered floors), Highways Construction Co. Ltd. (asphalt tanking and roofs), H. C. Hiscock Ltd., Merchant Adventurers of London Ltd., Troughton and Young Ltd. (electric lighting fittings), Strand Electric & Engineering Co. Ltd. (stage lighting fittings), Gent & Co. Ltd. (electric clocks), Nobel Chemical Finishes Ltd. (paint and distemper—"Dulux"), Mander Bros. Ltd. (paint and distemper), Walpamur Co. Ltd. (paint and distemper—"Walpamur"), Hunter and Hyland Ltd. (curtain tracks), Ernest Race Ltd. (curtains), Finmar Ltd., Thonet Bros. Ltd., Fredk. Parker and Sons Ltd., Henry Stone and Son Ltd., Wringh & Co. Ltd., Mann Egerton & Co. Ltd., Kerridge (Builders) Ltd. (furniture), Stonehenge Brick Co. (sand lime bricks for interior facings), W. T. Lamb and Sons (dark brown facings), London Brick Co. (Fletton bricks).

THE LONDON SAND BLAST DECORATIVE GLASS WORKS LTD.

Telephone: ADVANCE 1074

DIRECTION SIGNS

ILLUMINATED SIGNS

TRAFFIC DIRECTION SIGNS



PHANTOM SIGNS

REFLECTING SIGNS

AIR RAID PRECAUTION SIGNS



Section of Three-way Duct System



Three-way
Junction Box
 $10'' \times 10'' \times 2\frac{5}{8}''$



Connecting Duct to
Standard B.S. Junction Box
having back outlet measuring $1\frac{3}{8}''$ diameter.



Standpipe
Unit
5.15 amp.
Height from
floor level
 $5\frac{1}{2}''$



The G.E.C. UNDER FLOOR METAL DUCT SYSTEM complies with B.S. 774, 1938, and enables the cables for every electrical service such as - Light - Heating - Post Office Telephones - Dictaphones - Bells - Signals - Intercommunication Telephones - Ventilating Fans - Fire Alarms, etc., to be accommodated.

Main Features include - Simplicity - Economy - Adaptability Combined with Rigidity and Continuity throughout.

MADE IN ENGLAND

ALWAYS USE "PHILPLUG" FOR EVERY SITUATION
REQUIRING IMMEDIATE AND PERMANENT FIXING

For full information consult G.E.C. Catalogue C.7195, Pages 99 to 102

Advt. of The General Electric Co., Ltd., Magnet House, Kingsway, London, W.C.2

TRADE AND CRAFT

The Guildhall, Cambridge.

Architect : C. Cowles-Voysey.

The general contractors were Foster and Dicksee Ltd. Among the sub-contractors were the following : Grierson Ltd. (electric installation), G. N. Haden and Sons Ltd. (heating, hot water installation and ventilating), Dorman, Long & Co. Ltd. (structural steelwork), Williamson, Cliff Ltd. (facing bricks), Carter & Co., and Clock House Brick Co. (tiles), Art Pavements and Decorations Ltd. (terrazzo work), F. Harris (ancaster linings), Empire Stone Co. Ltd. (artificial stone), La Brea Asphalt Co. Ltd. (asphalt), Dunlop Rubber Co. Ltd. (rubber flooring), Stevens and Adams Ltd. (wood flooring), Siegwart Fireproof Flooring Co. Ltd. (fireproof flooring), F. DeJong & Co. Ltd. (fibrous plaster), May Acoustics Ltd. (acoustic work), J. and E. Hall Ltd. (lifts), Haywards Ltd. (skylights, pavement lights), Henry Hope and Sons. Ltd. (daylights), Morris Singer Co. Ltd. (bronze balconies and screens and doors), Garton and Thorne Ltd. (staircase balustrades), Laurence Bradshaw and John Brandon-Jones (models for bronzework), Eric Munday (inscription), Chatwood Safe Co. Ltd. (strong-room doors), Merryweather and Sons Ltd. (hydrants installation), Pontifex and Emanuel (sanitary fittings), Yannidis & Co. Ltd. (ironmongery), James Gibbons Ltd.

(cloakroom fittings), W. Larkins (flagstaff), G. H. Turner (amber glass and electric light fittings), Wm. Hill and Sons and Norman and Beard Ltd. (work to organ), Gillett and Johnston Ltd. (turret clock, master clock and trinkle charge), R.M. Radio Ltd. (loudspeaker), Dictograph Telephones Ltd. (internal telephones), R. Fox and Sons (cellulose spray), Eaden, Lilley & Co. Ltd. (roof blinds), Cox & Co. (seating), J. P. White and Sons Ltd. (special joinery and furniture), Macdonald Gill (decorative map), Sidney Laughton (carpets), Waring and Gillow Ltd. (curtains), C. E. Welstead and Sons Ltd. (bronze windows).

Engert and Rolfe Ltd. (asphalt), James Gibbons Ltd. (bronze balcony rails), Robert Y. Ames, Ightham Brick and Tile Co. Ltd., and Sussex Brick Co. Ltd. (bricks), J. Starkie Gardner Ltd. (bronze doors), Modern Surfaces Ltd. (cement glaze), E. J. and A. T. Bradford Ltd. (foundation stone), John Bellamy Ltd. (fuel hoppers), Shaws Glazed Brick Co. Ltd. (faience), Haggis Ltd. (flush doors), Compton Bros. (Glass Works) Ltd., Pilkington Bros. Ltd., and London Sand Blast Decorative Glass Works Ltd. (glass), Fenning & Co. Ltd. (granite), Haskins (grilles), Garton and Thorne Ltd. (hand-railing, laylight, etc., and ironmongery), S. W. Farmer and Son Ltd. (iron stairs), Waygood-Otis Ltd. (lifts), J. W. Gray and Son (lightning conductors), Lamson Engineering Co. Ltd. (letter chute), Haywards Ltd. (lantern lights), Carter & Co. (London) Ltd. (mosaic), Merryweather and Sons Ltd. (moving partitions), J. Whitehead and Sons Ltd. (marble work), Bath and Portland Stone Firms Ltd. (Portland stone), John P. White and Sons Ltd., and J. L. Green and Vardy Ltd. (panelling), Lenscrete Ltd. (pavement lights), Adamsez Ltd. (sanitary fittings), Horace W. Cullum & Co. Ltd. (sound-proof construction, etc.), Moreland Hayne & Co. Ltd. (steelwork), Diespeker & Co. Ltd. (terrazzo), C. E. Welstead Ltd. (windows), Horsley Smith & Co. Ltd. (wood block floors), Frazzi Ltd., (Paropa patent roofing).

Greenwich Town Hall.

Architects : Culpin and Son.

Quantity Surveyors...Harris and Porter Consulting Structural Engineers

R. T. James and Partners Consulting Heating and Ventilation Engineers...J. Roger Preston and Partners Consulting Electrical Engineer D. Winton Thorpe, in association with Waldo Maitland Acoustical Consultant.....Hope Bagenal

The general contractors were William Moss and Sons Ltd. Among the sub-contractors and suppliers were the following :



HOSPITAL EQUIPMENT

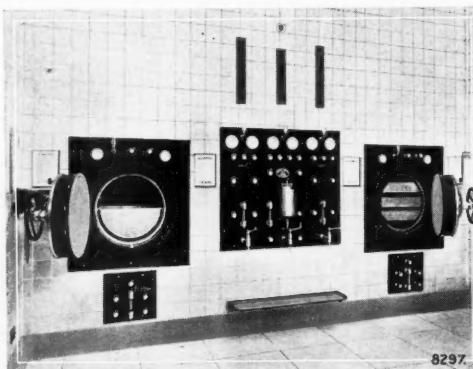


Fig. 8297—"Recessed" Dry Process, Bowl, Instrument Water and Saline Sterilizers. General Hospital, Warrington.

**LAUNDRY MACHINERY,
STERILIZERS AND DISINFECTORS,
INCINERATORS.**

Manlove, Alliott & Co. Ltd.

NOTTINGHAM

LONDON OFFICE : 41 & 42, Parliament St., Westminster, S.W.1

RETAINING WALLS IN THE CITY OF LONDON



PREMISES, PAUL & WHITFIELD STREETS,
SHOREDITCH, E.C.

Architects :
RILEY & GLANFIELD, F.R.I.B.A.,
LONDON.

Contractors :
MESSRS. E. A. ROOME & CO., LTD.
LONDON.

'PUDLO'
BRAND
CEMENT WATERPROOFER

READ HOW THIS BASEMENT WAS MADE WATERPROOF

With the greatest simplicity and at a much less cost than would have been involved by any other method that could have given equal security. In the design of the reinforced concrete the only consideration required was to provide the necessary structural strength. This concrete was mixed 4:2:1 and the addition of 3 lb. of 'PUDLO' Brand waterproofer to each 100 lb. of the cement gave it the complete impermeability so essential to a dry basement. The floor of the basement is also of concrete similarly waterproofed, and the results have proved eminently satisfactory. Similar measures are most suitable for underground air raid shelters and provide a high degree of security. Ask for Specification 5.A.

KERNER-GREENWOOD & COMPANY, LIMITED
MARKET SQUARE, KING'S LYNN.

Sole Proprietors and Manufacturers

Cd.P.E.

The word 'PUDLO' is the Registered Trade Brand of Kerner-Greenwood & Co. Ltd., by whom all articles bearing that Brand are manufactured or guaranteed.



GLENFIELD COMBINED HYGIENIC DRINKING FOUNTAIN AND TAP

(STATUTORY RULES & ORDERS
OF 1917, No. 1068)



WE illustrate the Glenfield Combined Drinking Fountain and Tap, the type of which not only complies with the regulations under the Statutory Rules and Orders of 1917, No. 1068, but is also recommended by the Home Office.

It consists of a substantial Water Tap, clearly marked "Drinking Water" (to avoid contravention), incorporating a robust three-way plug cock mechanism so arranged as to give free passage through the tap outlet for washing purposes, or to divert the water stream to the drinking fountain nozzle as required.

Water for washing purposes cannot be obtained until the drinking fountain nozzle has been pushed well out of the way of contamination. Similarly, when the drinking fountain is in use, the water supply to the tap is automatically cut off.

Construction is simple and robust in the extreme, and great care has been taken to eliminate all crevices or joints, in which dust or germs might find lodgment, and the whole fitment can be kept spotlessly clean with a minimum of work.

A further important advantage is the substantial reduction in cost of installation effected by using this combination in place of separate units for drinking and washing.

We shall be glad to quote for any quantity in white metal or in bronze, polished, chromium or nickel plated.

A complimentary copy of our illustrated descriptive leaflet "The Glenfield Combined Tap and Drinking Fountain" will be forwarded post free on request.

MESSRS. GLENFIELD & KENNEDY LTD.
KILMARNOCK, SCOTLAND.

Please send a copy of folder
"THE GLENFIELD COMBINED TAP AND
HYGIENIC DRINKING FOUNTAIN"

to

.....
.....

Glenfield
GLENFIELD AND KENNEDY LIMITED KILMARNOCK
HYDRAULIC ENGINEERS TO THE EMPIRE





Weston Biscuit Factory
Llantarnam, Mon.

ABERTHAW

PORTLAND CEMENT

Sole Sales Agents:

T. BEYNON & CO., LTD.

MERTHYR HOUSE, CARDIFF

Telegrams:
Beynon, Cardiff

Telephone:
Cardiff 5220 (6 lines)

LONDON OFFICE: 3739, LIME STREET, LONDON E.C.3

FOR RELIABILITY, LONG SERVICE & Fuel Economy



In

CENTRAL WARMING
& HOT WATER
TAP SUPPLY

Illustrated Catalogue
sent gladly on request

Made by specialists in the production of Boilers for every purpose, WHITE ROSE BOILERS incorporate all the approved features of modern Boiler practice: maximum strength, durability and efficiency. They are designed for economy in fuel and operating costs; provision is made for coke, oil, or automatic stoker firing, and all series are convertible to L.P. Steam.

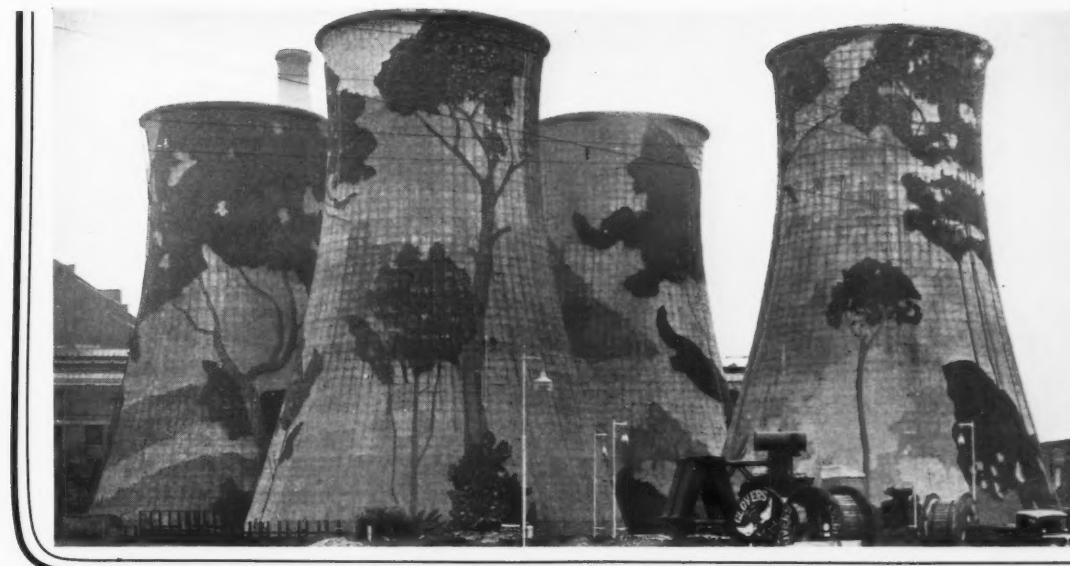
'WHITE ROSE'

HARTLEY & SUGDEN LTD.

LONDON OFFICE: 357, EUSTON ROAD, N.W.1.

WHITE ROSE
BOILER WORKS
HALIFAX
ENGLAND

Also at BIRMINGHAM · BRISTOL · GLASGOW · MANCHESTER · SHEFFIELD



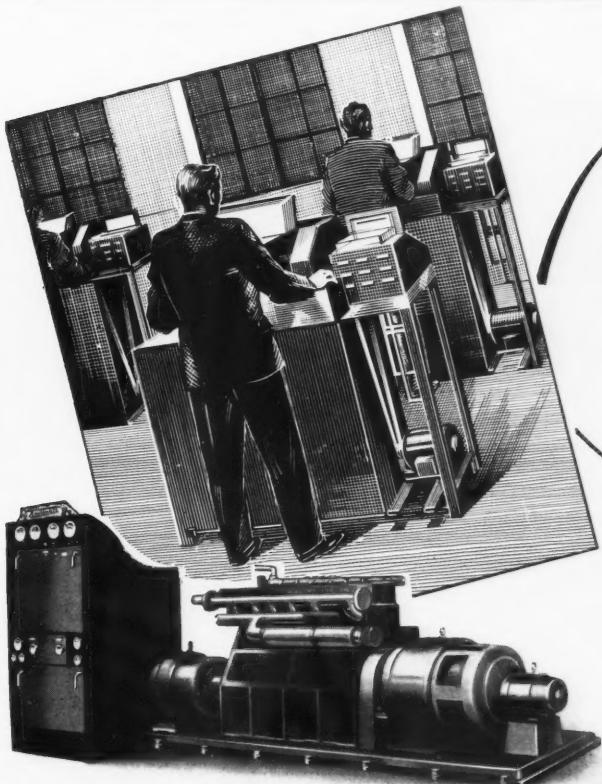
CAMOUFLAGED with "STIPPOLO"

Fourteen tons of "Stippolo" Oil Bound Water Paint is the estimated amount used on these 120 feet high towers and their camouflaged appearance is causing considerable interest throughout the country.

Architects, A.R.P. Officers, Public Authorities and others interested in Camouflage painting are invited to test the weather resisting properties of "Stippolo" and to write for further particulars relating to the successful painting of large buildings such as those illustrated. Literature and prices of "Kearsley" A.R.P. products sent on request.

The illustration is by kind permission of John Mould, Esq., General Manager, City Electricity Service, Leicester. The colour scheme was designed and supervised by E. Townsend, Esq., Cathedral Studio, 31 Full Street, Derby.

ROBERT KEARSLEY & CO., RIPON, YORKS



Electricity
Supply Breakdown
— but essential
services must
go on!

Where continuity of light and power is vital, the emergency supply must be of utmost dependability.

It is for this reason that the Services, important Municipalities, Railways, etc., in all parts of the country are now installing AUSTINLITE AUTOMATIC STANDBY PLANT.

Write today for full details and specifications which will cover your requirements.

Austinlite

**AUTOMATIC
STANDBY PLANT**

AUSTINLITE LTD. Proprietors: CHANCE BROTHERS and CO. LIMITED, LIGHTHOUSE WORKS, SMETHWICK



Weston Biscuit Factory
Llantarnam, Mon.

ABERTHAW

PORTLAND CEMENT

Sole Sales Agents :

Telegrams :
Beynon, Cardiff

T. BEYNON & CO., LTD.
MERTHYR HOUSE, CARDIFF

Telephone :
Cardiff 5220 (6 lines)

LONDON OFFICE: 3739, LIME STREET, LONDON, E.C.3

FOR RELIABILITY, LONG SERVICE & Fuel Economy



In

CENTRAL WARMING
& HOT WATER
TAP SUPPLY

Illustrated Catalogue
sent gladly on request

Made by specialists in the production of Boilers for every purpose, WHITE ROSE BOILERS incorporate all the approved features of modern Boiler practice: maximum strength, durability and efficiency. They are designed for economy in fuel and operating costs; provision is made for coke, oil, or automatic stoker firing, and all series are convertible to L.P. Steam.

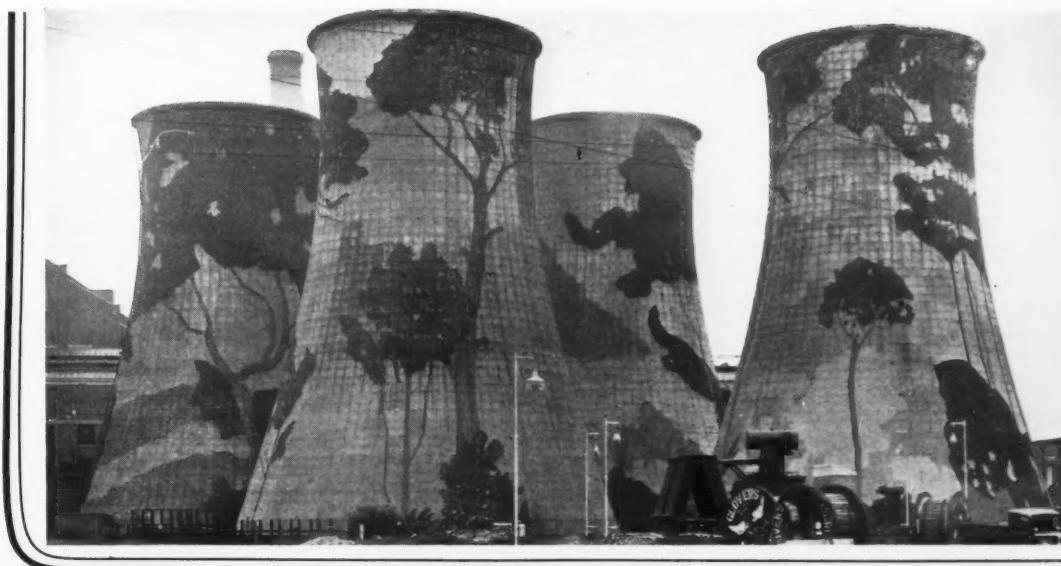
WHITE ROSE'

HARTLEY & SUGDEN LTD.

LONDON OFFICE: 357, EUSTON ROAD, N.W.1

Also at BIRMINGHAM · BRISTOL · GLASGOW · MANCHESTER · SHEFFIELD

WHITE ROSE
BOILER WORKS
HALIFAX
ENGLAND



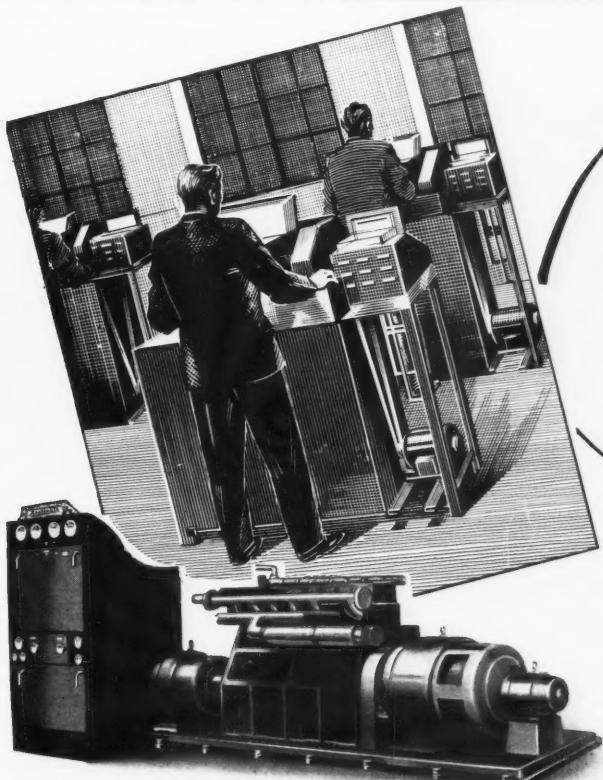
CAMOUFLAGED with "STIPPOLO"

Fourteen tons of "Stippolo" Oil Bound Water Paint is the estimated amount used on these 120 feet high towers and their camouflaged appearance is causing considerable interest throughout the country.

Architects, A.R.P. Officers, Public Authorities and others interested in Camouflage painting are invited to test the weather resisting properties of "Stippolo" and to write for further particulars relating to the successful painting of large buildings such as those illustrated. Literature and prices of "Kearsley" A.R.P. products sent on request.

The illustration is by kind permission of John Mould, Esq., General Manager, City Electricity Service, Leicester. The colour scheme was designed and supervised by E. Townsend, Esq., Cathedral Studio, 31 Full Street, Derby.

ROBERT KEARSLEY & CO., RIPON, YORKS



Electricity
Supply Breakdown
- but essential
services must
go on!

Where continuity of light and power is vital, the emergency supply must be of utmost dependability.

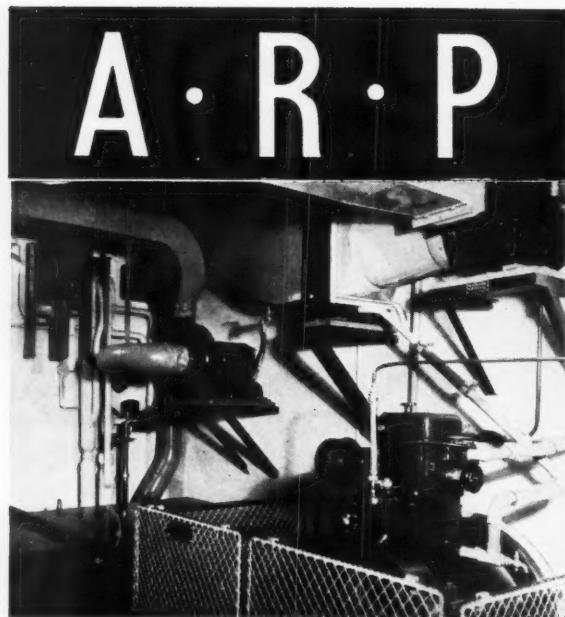
It is for this reason that the Services, important Municipalities, Railways, etc., in all parts of the country are now installing AUSTINLITE AUTOMATIC STANDBY PLANT.

Write today for full details and specifications which will cover your requirements.

Austinlite

**AUTOMATIC
STANDBY PLANT**

AUSTINLITE LTD. Proprietors: CHANCE BROTHERS and CO. LIMITED, LIGHTHOUSE WORKS, SMETHWICK



Plant Room of Air Raid Shelter for the Eagle Oil & Shipping Company Limited, London

In this Shelter accommodating 100 persons, comfort and protection are ensured by the installation by Richard Crittall & Company Limited of the following apparatus :

Gas Filtration Plant, Ventilating System for Shelter with Stylovent Adjustable High Speed Air Outlets, Extract Ventilation for Lavatories, Diesel Generator for Light and Power.

The complete design and equipment of all types of Air Raid Shelter undertaken.

Write for Informative Booklets :
"Warming for Health and Comfort," "Modern Methods of Heating by Electricity," "Air Conditioning," "Air Raid Precautions," "Cooking Equipment."

RICHARD CRITTALL AND COMPANY LIMITED

BUSH HOUSE, LONDON, W.C.2. PHONE TEMPLE BAR 7777

BIRMINGHAM: Prudential Buildings, St. Philip's Place. Central 2478
LIVERPOOL: Royal Liver Building, Pier Head. Bank 5832
SOUTHAMPTON: 21 Portland Street. Southampton 2156



The "At a Glance" Series

English Architecture at a Glance

A simple review in pictures of the Chief Periods of English Architecture. 1s. 6d. net. Postage 2d.

English Furniture at a Glance

By CHARLES H. HAYWARD. Sixteenth to Eighteenth Centuries. 3s. 6d. net. Postage 3d.

English Rooms and their Decoration at a Glance

By CHARLES H. HAYWARD. Vol. I, 1066-1620; Vol. II, 1620-1800. 3s. 6d. net. Postage 3d.

Sailing Ships at a Glance

By EDWARD W. HORBS, A.I.N.A. From the earliest times until today. 3s. 6d. Postage 4d.

THE ARCHITECTURAL PRESS LTD.
45 THE AVENUE, CHEAM, SURREY

THE HONEYWOOD FILE

H. B. Creswell, F.R.I.B.A.

This book has already become almost a classic on architectural practice and etiquette. It purports to be an architect's correspondence file in relation to the building of a country house—letters interchanged between architect, client, builder, lawyer, client's wife, and so forth, and although written in a vein of rich humour, is full of practical information and of the most sage and sapient advice. Price 7s. 6d. Postage 6d.

THE HONEYWOOD SETTLEMENT

H. B. Creswell, F.R.I.B.A.

"The Honeywood Settlement" is the second and concluding volume of "The Honeywood File," and carries the story from the completion and occupation of the house to a conclusion ten months later, when the last defect has been disposed of, the last dispute settled and the last account paid. Price 7s. 6d. Postage 6d.

JAGO v. SWILLERTON AND TOOMER

H. B. Creswell, F.R.I.B.A.

In this book the author presents a vivid narrative of a reference to arbitration. Details of procedure, the conflicting arguments of counsel and the arbitrator's award and the reason for it, are all displayed, while the responsibilities of architects and builders, together with the main principles of legal negligence involved by those responsibilities, are presented with a clearness which textbooks necessarily lack. Price 5s. Postage 4d.

THE ARCHITECTURAL PRESS
45 The Avenue, Cheam, Surrey

GRANWOOD FLOORING

(REGISTERED)

Granwood Flooring, and the Granwood Flooring Co.'s patent "Evans System" of Under-Floor Heating are used extensively at Impington Village College, Cambs., described elsewhere in this issue—Architects Professor Walter Gropius and E. Maxwell Fry, A.R.I.B.A.

Granwood floor blocks are laid in a wet screed of sand and cement on concrete subfloors, and laying can commence 24 hours after completion of subfloor when necessary, a fact which is being appreciated on many jobs of National importance now proceeding.

Granwood blocks have no expansion or contraction, do not support combustion, are damp proof, dry rot, vermin and insect proof, contain no magnesite, and do not sweat, crack or disintegrate. Used in 1,200 Schools, 500 Hospitals and Churches, and many thousands of buildings of other types.

**GRANWOOD FLOORING CO. LTD.,
RIDDINGS, DERBYS.**

Phone : Leabrooks 122 & 123.

Telegrams : Granflor, Alfreton.

LONDON OFFICE: 21, BEDFORD ROW, W.C.1.

Phone : CHAncery 7348.

THE DESIGN OF NURSERY AND ELEMENTARY

SCHOOLS

This book describes the new educational policy in relation to the design of Nursery and Elementary Schools. Dimension and layouts are considered for each element in the school plan; the various alternative groupings of the plan units are discussed, and a large number of complete school schemes carried out in this country and abroad are illustrated. No such survey of contemporary school buildings exists at present in this country. The book contains 120 pages, size 12½ × 9 ins., about 250 photographs and drawings and is printed on art paper, bound in cloth.

By

H. Myles Wright, M.A., A.R.I.B.A.

and

R. Gardner Medwin, B.Arch., A.R.I.B.A.

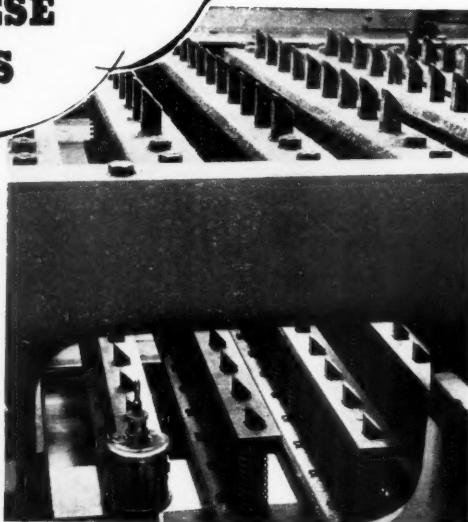
Price 10s. 6d. Postage 6d. (Abroad 10d.)

THE ARCHITECTURAL PRESS, 45 THE AVENUE, CHEAM, SURREY

**EVERY PLANK IN A LEADERFLUSH
DOOR GOES THROUGH THESE
RELENTLESS STEEL FINGERS**

The finger feed surface planer illustrated is probably the only one in use in a mass production door factory. It ensures that even a plank that is out of true when it enters the machine can be planed to a dead true surface on one side so that the other three faces can be planed up square. The steel fingers are strongly spring-mounted on an endless band and have all the precision and delicacy of the human hand in guiding and regulating the pressure on the plank as it goes through. Many firms are content simply to plane the surface, which means that a smooth finish may be put on a warped plank, but such methods are not good enough for Leaderflush who do the job right from start to finish.

Leaderflush Ltd., Stapleford Road, Trowell, Notts. Tel.: Ilkeston 623-4.



BEAUTY THAT LASTS
STRENGTH THAT ENDURES

COGENT

IMPINGTON VILLAGE COLLEGE, CAMBRIDGESHIRE



Architects: Walter Gropius and E. Maxwell Fry.

GENERAL CONTRACTORS

JOHNSON & BAILEY LTD., CAMBRIDGE

B.I.

offer
A NEW (C.M.A.)

FIRE-RESISTING
INSULATED
CABLE

U.K. PAT. No. 499908



These new B.I. Cables possess remarkable fire-resisting properties combined with the flexibility and ease of installation of the standard rubber cable. Regardless of the source of heat, the intensity of the flame, or the period of application, B.I. Fire-Resisting Insulated Cable will extinguish itself after the source of heat is removed.

The dielectric, being an organic material, will naturally be destroyed by fire, but even when an intense flame is applied, only the portion of the cable in the immediate vicinity of the flame will be affected. In the event of an electrical failure in the circuit, cable of this type will not continue to burn when the arc is extinguished, nor will it help to spread an extraneous fire.

These cables are therefore recommended for use in situations where there are special fire risks, or where the consequences of a fire would be more than usually serious, as in buildings of historical importance, Museums, Art Galleries, certain types of factories and warehouses, electricity sub-stations, switch-rooms and the like.



BRITISH INSULATED CABLES LTD.

Cablemakers and Electrical Engineers

PRESOCOT, LANCS.

TEL. NO.: PRESOCOT 6571

"ECLIPSE"
PRESSED
STEEL STAIRS

In great demand. Thousands in use in the finest buildings in Britain. Designed, manufactured, and erected on very short notice.

Any size. Any design. Specified by leading Architects.

Our Technical Experts at your service.

Note: WE SPECIALISE IN AIR RAID SHELTERS

Other Braby Specialities:

"ECLIPSE" SPECIAL CORRUGATED STEEL SHEETS, large and strong, curved to suit any Shelter.

BRABY'S CURVED CULVERT SHEETS.

BRABY'S "DOVETAIL" FLOORING SHEETS.

BRABY'S METAL-PLYWOOD PANELS.

Also Braby's Genuine "LONG LIFE" WROUGHT IRON SHEET for Gasometers and Roofs.

Will outlast for years all others!



FRED K. BRABY & CO.
LIMITED

ECLIPSE STEEL WORKS
PETERSHILL ROAD, GLASGOW

TELEGRAMS: "BRABY, GLASGOW" TELEPHONES: SPRINGBURN 5151 (10 LINES)
ALSO WORKS AT LONDON, LIVERPOOL, BRISTOL, FALKIRK AND MOTHERWELL



A



Selection of
BOOKS
on



DOMESTIC ARCHITECTURE

SMALL HOUSES, £500-£2,500

Edited by H. Myles Wright, A.R.I.B.A.

This book contains photographs and plans of a large number of houses of widely different types. A selection of interior views is also included, and to every house is appended a descriptive note giving particulars of the site, plan, construction, services, equipment, cost, etc. Price 7s. 6d. Postage 6d.

THE MODERN HOUSE

By F. R. S. Yorke, A.R.I.B.A.

This book is divided into six sections: Introduction—Plan—Walls and Windows—Roof—Experimental Houses—General illustrations. This last section contains over 140 pages of photographs, plans, Constructional details and descriptions of English, American and Continental houses. Price 2ls.

THE MODERN HOUSE IN ENGLAND

Edited by F. R. S. Yorke, A.R.I.B.A.

Comprising the contents of the December, 1936, Architectural Review, with a number of additional examples of modern English houses built since then. The illustrations are accompanied by notes on the construction and materials. 144 pages, including 350 photographs, plans and drawings. Price 15s. Postage 6d.

WEEK-END HOUSES, COTTAGES AND BUNGALOWS

Edited by Alan Hastings

The first part deals with houses and cottages in England, the second with week-end houses abroad and the third with bungalows. 112 pages, including photographs, plans and full particulars including cost. Price 7s. 6d. Postage 6d.

An illustrated prospectus of any of the above books will be sent on request

Published by THE ARCHITECTURAL PRESS · 45 THE AVENUE · CHEAM · SURREY

